Table of Contents

General Information 1-1
  General Information 1-3

Body Systems 2-1
  Fixed and Moveable Windows 2-3
  Horns and Pedestrian Alerts 2-15
  Lighting 2-18
  Vehicle Access 2-53

Brakes 3-1
  Park Brake 3-3

Driver Information and Entertainment 4-1
  Image Display Cameras 4-3

Engine/Propulsion 5-1
  12 V Starting and Charging 5-3

HVAC 6-1
  Heating, Ventilation, and Air Conditioning 6-3
  HVAC - Automatic 6-4
  HVAC - Manual 6-15

Power and Signal Distribution 7-1
  Data Communications 7-3
  Electrical Component and Inline Harness Connector End Views 7-29
  Electrical Component Locator and Harness Routing Views 7-934
  Power Outlets 7-1055
  Wiring Systems and Power Management 7-1066

Safety and Security 8-1
  Immobilizer 8-3
  Remote Functions 8-7
  Supplemental Restraints 8-15

Transmission 9-1
  Shift Lock Control 9-3

INDEX INDEX-1

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Section 1

General Information

General Information 1-3
- **Introduction** 1-3
  - Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage 1-3
  - Vehicle Certification, Tire Placard, and Anti-Theft Label 1-5
  - RPO Code List 1-7

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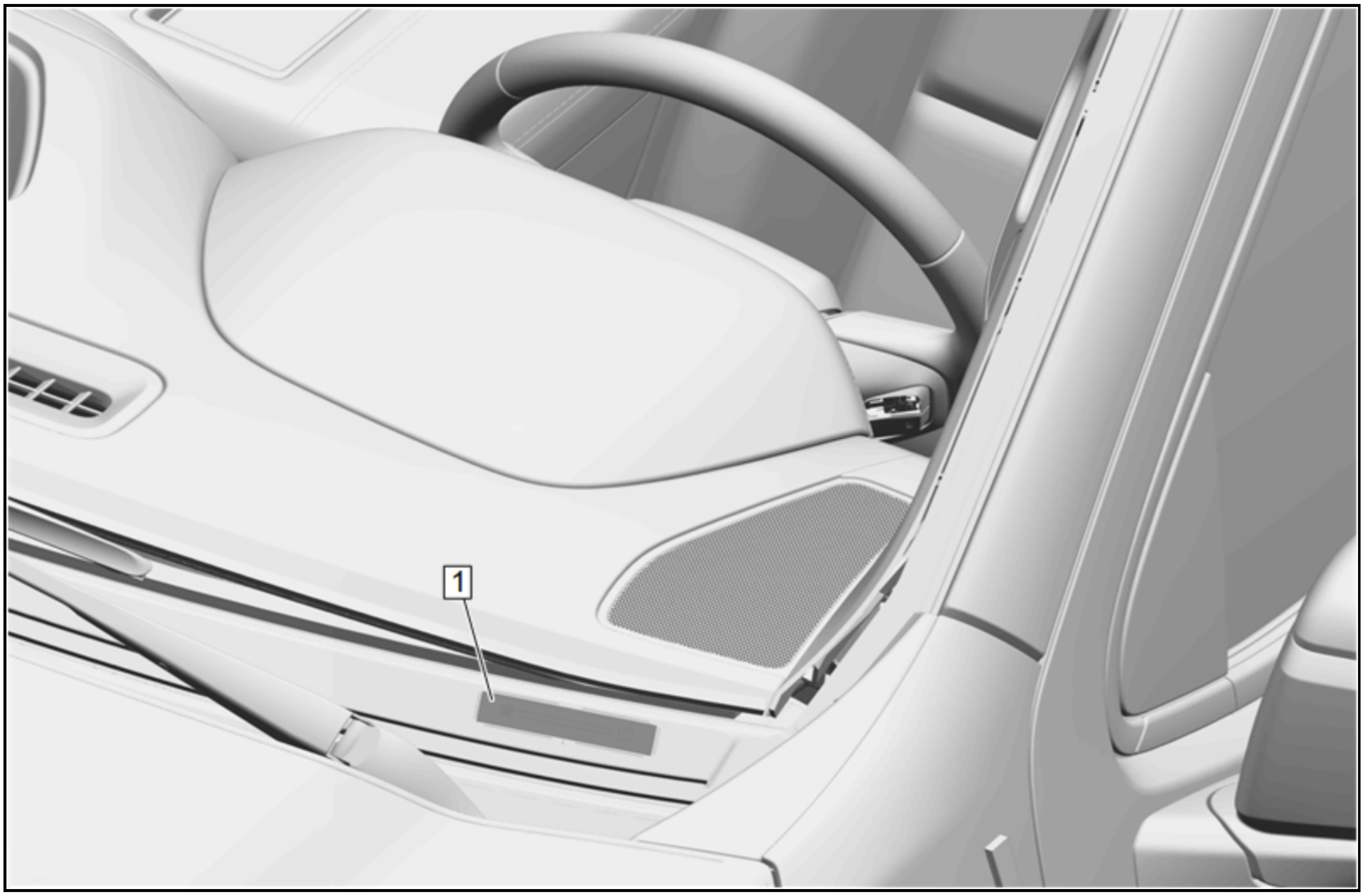
General Information

Introduction

Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage



The vehicle identification number (VIN) plate (1) is the legal identifier of the vehicle. The VIN plate is located on the upper left corner of the instrument panel. The VIN number can be seen through the windshield from the outside of the vehicle:

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Country of Origin	1	United States
		3	Mexico
2	Manufacturer	G	General Motors
3	Vehicle Brand/Type	B	Chevrolet Incomplete
		C	Chevrolet Truck
4	GVWR/Brake System/Body Style	N	6,001–7,000 lbs/Hydraulic/Standard Cab
		P	6,001–7,000 lbs/Hydraulic/Crew Cab
		R	6,001–7,000 lbs/Hydraulic/Extended Cab
		U	7,001–8,000 lbs/Hydraulic/Crew Cab
		V	7,001–8,000 lbs/Hydraulic/Extended Cab

Vehicle Identification Number (VIN) System (cont'd)

Position	Definition	Character	Description
5/6	Line Chassis/Series	W/A	4x2, 1500 Chevrolet Silverado, Work Truck
		W/B	4x2, 1500 Chevrolet Silverado, Custom
		W/C	4x2, 1500 Chevrolet Silverado, LT
		W/D	4x2, 1500 Chevrolet Silverado, RST
		W/E	4x2, 1500 Chevrolet Silverado, LTZ
		W/F	4x2, 1500 Chevrolet Silverado, High Country
		W/9	4x2, 1500 Chevrolet Silverado, (Non-US, Non-Canada)
		Y/A	4x4, 1500 Chevrolet Silverado, Work Truck
		Y/B	4x4, 1500 Chevrolet Silverado, Custom
		Y/C	4x4, 1500 Chevrolet Silverado, Trail Boss Custom
		Y/D	4x4, 1500 Chevrolet Silverado, LT
		Y/E	4x4, 1500 Chevrolet Silverado, RST
		Y/F	4x4, 1500 Chevrolet Silverado, Trail Boss - LT
		Y/G	4x4, 1500 Chevrolet Silverado, LTZ
		Y/H	4x4, 1500 Chevrolet Silverado, High Country
		Y/J	4x4, 1500 Chevrolet Silverado LTD LT-L
		Y/9	4x4, 1500 Chevrolet Silverado, (Non-US, Non-Canada)
7	Restraint System	E	RPO AY0 – Active Manual Belts, Airbags – Driver and Passenger – Front (1st row), Front Seat Side (1st row), Roof Side (all seating rows)
8	Engine Type	D	RPO L84, Engine Gas, 8 Cylinder, 5.3L, DI, DFM*, Aluminum, GEN 5, VAR 2
		F	RPO L82, Engine Gas, 8 Cylinder, 5.3L, DI, AFM*, Aluminum, GEN 5, VAR 1
		H	RPO LV3. Engine Gas, 6 Cylinder, 4.3L, GEN 5, SIDI, V6, VVT, OHV, E85 MAX, Aluminum
		K	RPO L3B, Engine Gas, 4 Cylinder, L4, 2.7L, SIDI VVT, Turbo, DOHC, Aluminum
		L	RPO L87, Engine Gas, 8 Cylinder, V8, 6.2L, DI AFM, Aluminum, GEN 5
		T	RPO LM2, Engine Diesel, 6 Cylinder, 3.0L, CRI, V6, DOHC, Turbo, VGT, Aluminum
		7	RPO L8T - ENGINE GAS, 8 CYL, 6.6L, SIDI, VVT, CAST IRON
9	Check Digit	—	Check Digit
10	Model Year	N	2022
		Z	Fort Wayne, Indiana, USA
		G	Silao, Mexico
12–17	Plant Sequence Number	—	Plant Sequence Number

2.7L (L3B) Engine ID and VIN Derivative Location

Engine Identification

3.0L (LM2) Diesel Engine ID and VIN Derivative Location

Engine Identification

5.3L (L82 L84) or 6.2L (L87) Engine ID and VIN Derivative Location

Engine Identification

10L80 (MQB) Transmission ID and VIN Derivative Location

Transmission Identification Information

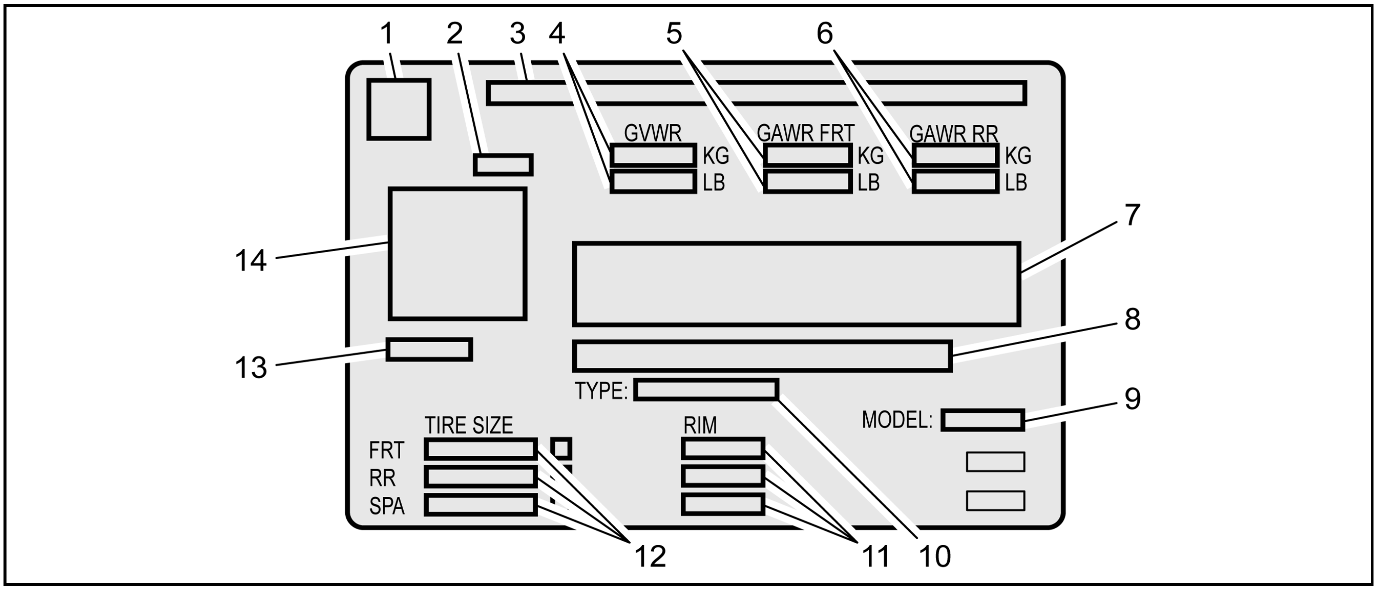
6L80 (MYC) Transmission ID and VIN Derivative Location

Transmission Identification Information

8L90 (MQE) Transmission ID and VIN Derivative Location

Transmission Identification Information

Vehicle Certification, Tire Placard, and Anti-Theft Label



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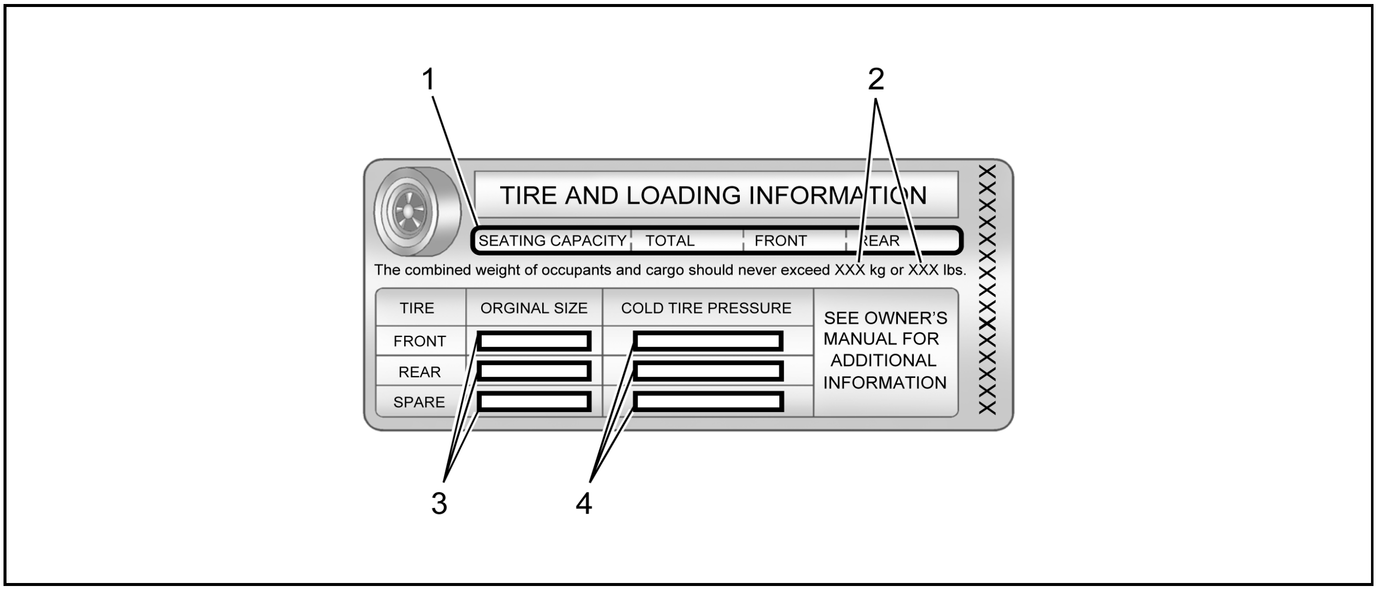
Vehicle Certification Label

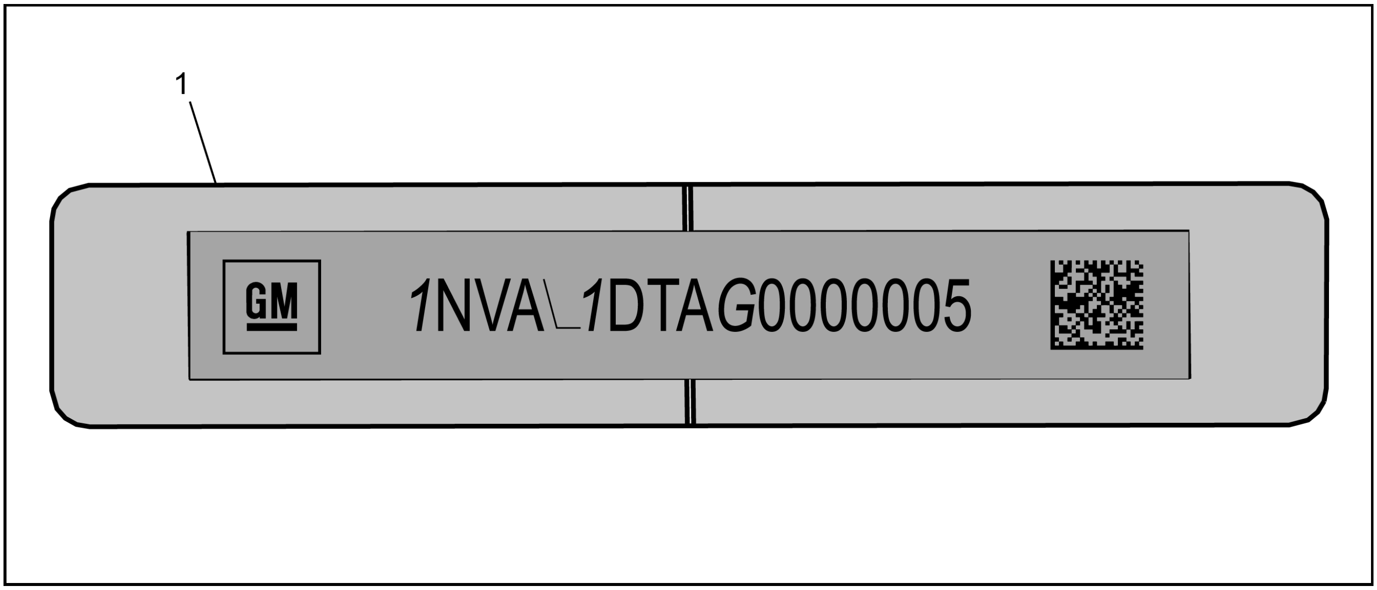
Callout	Description
A vehicle-specific Certification label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments:	
1	Logo
2	Final Date of Manufacture (Month and Year MM/YY) Date of manufacture is to reflect the date that the vehicle is counted as built. In those cases where a replacement label is needed, the replacement label should reflect the actual build date not the date of replacement.
3	Name of Manufacturer
4	Maximum Gross Vehicle Weight Rating (GVWR)
5	Maximum Gross Axle Weight Rating (GAWR) - Front
6	Maximum Gross Axle Weight Rating (GAWR) - Rear
7	Certification Statement
8	Vehicle Identification Number (VIN)
9	Engineering Model Number
10	Vehicle Class Type (Pass Car, etc.)
11	Original Equipment Rim Size
12	Original Equipment Tire Size
13	Paint Code
14	QR Code Once the QR code is scanned, the information will appear in this order on your smartphone or laptop: VIN, Model Year, Model, Build Month, Year, Engineering Book, Vehicle Order Number, 3 Digit RPO Codes sorted alphanumerically and the Paint Code (same code appears the lower left of the QR code)


1
2
TIRE AND LOADING INFORMATION
SEATING CAPACITY
TOTAL
FRONT
REAR
The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.
TIRE
ORGINAL SIZE
COLD TIRE PRESSURE
FRONT
REAR
SPARE
SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
XXXXXXXXXXXXX
3
4

4962282

Tire Placard

Callout	Description
A vehicle-specific Tire and Loading Information label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments:	
1	Specified Occupant Seating Positions
2	Maximum Vehicle Capacity Weight
3	Original Equipment Tire Size
4	Tire Pressure, Front, Rear, and Spare (Cold)


1
GM
1NVA⎿1DTAG0000005

4962289

Anti-Theft Label

Callout	Description
This legal identifier is in the front corner of the instrument panel, on the driver side of the vehicle. It can be seen through the windshield from outside. The Vehicle Identification Number (VIN) also appears on the Vehicle Certification and certificates of title and registration.	
1	Vehicle Identification Number (VIN)

RPO Code List

The following table provides the description of the Regular Production Option (RPO) codes that are available on the vehicle. The vehicle's RPO list is printed on the Service Parts Identification Label.

RPO	Description
1CX	PACKAGE-CX OPTION 1
1LT	PACKAGE-LT OPTION 1
1LZ	PACKAGE-LZ OPTION 1
1SA	PACKAGE-OPTION 01
1SP	PACKAGE-OPTION 14
1WT	PACKAGE-WT OPTION 1
2CX	PACKAGE-CX OPTION 2
2FL	PACKAGE-FL OPTION 2
2LT	PACKAGE-LT OPTION 2
3LZ	PACKAGE-LZ OPTION 3
3SA	PACKAGE-SLE OPTION 1
3SB	PACKAGE-SLE OPTION 2
3VL	PACKAGE-VL OPTION 3
4AA	INTERIOR TRIM-JET BLACK
4F2	INTERIOR TRIM-JET BLACK / KALAHARI
4JJ	INTERIOR TRIM-GIDEON/VY DK ATMOSPHERE
4JR	INTERIOR TRIM-DARK ASH GRAY/VY DK ATMOSPHERE
4JS	INTERIOR TRIM-JET BLACK/UMBER
4SA	PACKAGE-SLT OPTION 1
4SB	PACKAGE-SLT OPTION 2
5A7	WHEEL SPARE-NONE
5AZ	ACCESSORY-SAFETY KIT - UNIVERSAL
5JL	ACCESSORY-BRAKE UPGRADE PKG 1 - COMPLETE
5LE	ACCESSORY-GARAGE DOOR OPENER
5LL	ACCESSORY-DECAL PACKAGE - BODYSIDE - DESIGN 10
5LM	ACCESSORY-DECAL PACKAGE - BODYSIDE - DESIGN 11
5SA	PACKAGE-DENALI OPTION 1
5VE	ACCESSORY-EXHAUST TIP - DESIGN 5
5VF	ACCESSORY-EXHAUST TIP - DESIGN 3
5VG	ACCESSORY-EXHAUST TIP - DESIGN 4
5VI	ACCESSORY-TIE DOWN RINGS - CARGO AREA
5W4	SALES PACKAGE-SPECIAL SERVICE, MUNICIPAL
5W7	ACCESSORY-AIR FILTER - PERFORMANCE
63B	ACCESSORY-TONNEAU - RR COMPT - TRI FOLDING
63G	ACCESSORY-TAILGATE ASSIST LIGHTING
65C	LABEL, WARNING-CALIFORNIA, PROP 65 COMPLIANT
6K5	SALES PACKAGE-CONVENIENCE II
9J4	BUMPER RR-(NONE)
9L3	TIRE SPARE-NONE
9L7	EQUIPMENT-ACSRY WRG JUNC BLK
A2S	ADJUSTER DRIVER SEAT-4WAY, DISCONT MAN RECLINE, MAN FORE/AFT
A2X	ADJUSTER DRIVER SEAT-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT
A45	MEMORY-SEAT ADJUSTER, MIRROR, POWER, DRIVER, PERSONALIZATION
A48	WINDOW RR-FULL WIDTH, SLIDING, POWER
A50	SEAT-FRT BKT
A60	LOCK CONTROL RR CMPT-LID, TAILGATE, KEY ACTIVATED
A68	SEAT RR-SPLIT, FOLDING
A6Q	WINDOW REG DRVR DR-MANUAL OPERATED (DO NOT USE NEXT NEW MAJOR)
A6R	WINDOW REG PASS DR-MANUAL OPERATED (DO NOT USE NEXT NEW MAJOR)
A7E	ADJUSTER PASS ST-4WAY, DISCONT MAN RECLINE, MAN FORE/AFT
A7K	ADJUSTER PASS ST-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT
AAK	ACCESSORY-FLOOR LINER - CONTOURED - ALT DESIGN 1
AE7	SEAT-FRT SPLIT, DRIVER, PASS
AED	WINDOW REG PASS DR-POWER OPERATED,EXPRESS DOWN (DO NOT USE NEXT NEW MAJOR)
AEF	WINDOW REG PASS DR-POWER OPERATED, EXPRESS UP/DOWN (DO NOT USE NEXT NEW MAJOR)

RPO	Description
AEQ	WINDOW REG REAR DR-POWER OPERATED, EXPRESS DOWN (DO NOT USE NEXT NEW MAJOR)
AKO	WINDOW TYPE-PRIVACY
AKP	WINDOW TYPE-SOLAR ABSORBING
AL0	SENSOR INDICATOR-INFLATABLE RESTRAINT, FRT PASS/CHILD PRESENCE DETECTOR
AMK	VEHICLE-EFFECTIVE POINT CONTROL, 2022 M.Y.
AQQ	LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE (MY 09 AND FUTURE)
ASV	EQUIPMENT-SENSOR AIR MOISTURE & W/S TEMP
ATH	LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, ALL DOORS
AU3	LOCK CONTROL-SIDE DR, ELEC
AVJ	LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, FRONT DOORS
AXG	WINDOW REG DRVR DR-POWER OPERATED, EXPRESS UP/DOWN (DO NOT USE NEXT NEW MAJOR)
AXK	VEHICLE TYPE-TRUCK
AY0	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER & PASS FRT, SEAT SIDE, ROOF SIDE
AZ3	SEAT-FRT SPLIT, DRIVER, PASS, FULL FEATURE CENTER
B1J	LINER-RR WHEELHOUSE
B26	SALES PACKAGE-SAFETY PACKAGE VAR. 1
B30	COVERING FLOOR-CARPET
B32	COVERING FRT-FLOOR MATS, AUX (DNU NEXT NEW MAJOR)
B33	COVERING REAR-FLOOR MATS, AUX (DNU NEXT NEW MAJOR)
B34	COVERING FRT-FLOOR MATS, CARPETED INSERT (DNU NEXT NEW MAJOR)
B35	COVERING REAR-FLOOR MATS, CARPETED INSERT (DNU NEXT NEW MAJOR)
B59	SALES PACKAGE-FUNCTIONAL PACKAGE
BAG	PARTS PKG-EXPORT
BAQ	SALES PACKAGE-STYLE VAR 1
BG9	COVERING FLOOR-RUBBER
BGP	SALES PACKAGE-SAFETY PACKAGE VAR. 2
BKE	COVERING REAR-FLOOR MATS, FLOOR LINER CARPET INSERT
BKF	COVERING FRT-FLOOR MATS, FLOOR LINER CARPET INSERT

RPO	Description
BPH	APPEARANCE PACKAGE-CHEVROLET "OFF ROAD"
BRS	STEPS, RUNNINGBOARD-SIDE, RETRACTABLE, POWER, BRIGHT
BTM	SWITCH-START, KEYLESS
BTV	REMOTE START-VEHICLE
BVT	STEPS, RUNNINGBOARD-SIDE, CHROME
BWN	STEPS-CORNER ASSIST, BUMPER
C32	HEATER AIR SYSTEM-HEATING/ DEFROSTER SYSTEM, REINFORCED, ELECTRIC
C49	DEFOGGER-RR WINDOW, ELECTRIC
C4P	HVAC SYSTEM-AIR CONDITIONER FRT, SEMIAUTOMATIC, ELECTRONIC CONTROLS
C59	VENT-AIR, CONSOLE, RR
C67	HVAC SYSTEM-AIR CONDITIONER FRT, ELECTRONIC CONTROLS
C9I	SWITCH-ROLL OVER SENSING
CF5	ROOF-SUN, GLASS, SLIDING, ELEC (DO NOT USE NEXT NEW MAJOR)
CGN	LINER-PUBX, SPRAY ON
CJ2	HVAC SYSTEM-AIR CONDITIONER FRT, AUTO TEMP CONT, AUX TEMP CONT
CTT	HITCH ASSIST-GUIDELINES
CU7	COUNTRY-KUWAIT
CU8	COUNTRY-SAUDI ARABIA
CV3	COUNTRY-MEXICO
CV6	COUNTRY-CHILE
CWM	SALES PACKAGE-TECHNOLOGY
CX5	COUNTRY-AUSTRALIA
CXH	SALES PACKAGE-INTERIOR LEATHER PACKAGE
D07	CONSOLE-FRT COMPT, FLOOR, CUSTOM
D31	MIRROR I/S R/V-TILT
D3S	COUNTRY-QATAR
D4C	COUNTRY-BAHRAIN
D4J	COUNTRY-US VIRGIN ISLAND
D5P	COUNTRY-UNITED ARABIC EMIRATES
D72	HANDLE O/S DOOR-BLACK
D75	HANDLE O/S DOOR-BODY COLOR
DD8	MIRROR I/S R/V-LT SENSITIVE
DEN	MIRROR O/S-LH & RH, MANUAL, MANUAL FOLD, FLAT/DRVR, CNVX/PASS
DEZ	MIRROR O/S-LH & RH, ELEC REMOTE, POWER FOLD, HEAT, PERM LIGHT, LT SENSITIVE DRVR, FLAT/DRVR, CNVX/PASS
DH6	MIRROR I/S FRT VAN-LH & RH, SUNSHADE, ILLUM (DO NOT USE NEXT NEW MAJOR)
DLF	MIRROR O/S-LH & RH, RC, ELEC, HEAT, MAN FOLD, FLAT/DRVR, CNVXPASS

RPO	Description
DNS	EQUIPMENT-SUPPLIER INSTALLED
DP6	MIRROR PROVISIONS-HOUSING, PAINTED
DP9	MIRROR PROVISIONS-HOUSING, CHROME
DPO	MIRROR O/S-LH & RH, WIDE FIELD OF VIEW, MAN EXTEND, MAN FOLD, HEATED, REMOTE CONT, AUX CARGO LMP, AUX CLEAR LMP
DQS	MIRROR O/S-LH & RH, WIDE LOAD, VERT GLS,MAN EXT,PWR FLD,HTD,TURN SIG IND,R/CON,MEMORY,AUX CLEAR LP,AUX CARGO LP
DRZ	MIRROR I/S R/V-LT SENSITIVE, FULL VIDEO DISPLAY
DT4	ASHTRAY-CIGARETTE LIGHTER
E20	HANDLE O/S DOOR-CHROME
E35	PICKUP BOX INNER-STEEL
E3Z	PICKUP BOX INNER-ALT MTL
E63	BODY EQUIPMENT-FLEETSIDE PICK-UP BOX
E6J	COUNTRY-PUERTO RICO
EF7	COUNTRY-UNITED STATES OF AMERICA (USA)
ENL	ENG CONTROL DISABLE-STOP/START, NON-LATCHING
EXP	EXPORT-
F48	CHASSIS DRIVE LINE-ALL WHEEL DRIVE (AWD)/FOUR WHEEL DRIVE(4WD), DRIVER SELECT
FE9	CERTIFICATION-EMISSION, FEDERAL
FHS	VEHICLE FUEL-GASOLINE E85
FHX	VEHICLE FUEL-DIESEL B20
FJW	VEHICLE FUEL-GASOLINE E15
FWI	PLANT CODE-FT WAYNE, IN, USA
G0S	SALES PACKAGE-CAMO EDITION
G1W	PRIMARY COLOR-EXTERIOR, ABALONE WHITE TRICOAT(140X)
G7C	PRIMARY COLOR-EXTERIOR, PULL ME OVER RED SOLID (130X)
G80	AXLE POSITRACTION-LIMITED SLIP
G9K	PRIMARY COLOR-EXTERIOR, SATIN STEEL GRAY MET-3 (464C)
GA0	PRIMARY COLOR-EXTERIOR, SOME KINDA BLUE MET -1 (619D)
GAN	PRIMARY COLOR-EXTERIOR, SWITCHBLADE SILVER MET (G) 636R
GAZ	PRIMARY COLOR-EXTERIOR, SUMMIT WHITE (G) 8624
GB8	PRIMARY COLOR-EXTERIOR, BLACK MEET KETTLE MET (384A)
GBA	PRIMARY COLOR-EXTERIOR, BLACK (G) 8555
GED	PRIMARY COLOR-EXTERIOR, WILDER MET-1 (244F)

RPO	Description
GEY	HANDLING CHARGE-FROM FT WAYNE ASM, TO GROUND EFFECTS LTD., FT WAYNE, IN, BACK TO FT WAYNE ASM.
GF2	TRIM PACKAGE-CUSTOM
GF3	TRIM PACKAGE-LT
GF4	TRIM PACKAGE-TRAIL BOSS LT
GF5	TRIM PACKAGE-WORK TRUCK
GF9	TRIM PACKAGE-LTZ
GFC	TRIM PACKAGE-RST
GFD	TRIM PACKAGE-HIGH COUNTRY
GFF	TRIM PACKAGE-BASE
GFG	TRIM PACKAGE-AT4
GFI	TRIM PACKAGE-SLE
GFJ	TRIM PACKAGE-ELEVATION
GFS	TRIM PACKAGE-ELEVATION-L
GFU	TRIM PACKAGE-SLT
GFW	TRIM PACKAGE-DENALI
GG0	TRIM PACKAGE-LT-L
GJI	PRIMARY COLOR-EXTERIOR, DARK SHADOW MET -1 (626D)
GNK	PRIMARY COLOR-EXTERIOR, OXFORD MET-1 (334E)
GPZ	TRIM PACKAGE-TRAIL BOSS CUSTOM
GSK	PRIMARY COLOR-EXTERIOR, CHERRY POP TINT-1 (252F)
GU5	AXLE REAR-3.23 RATIO
GU6	AXLE REAR-3.42 RATIO
H0U	INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, JET BLACK
H0Y	INTERIOR TRIM CONFIG-LEATHER, LEVEL 1, JET BLACK
H1T	INTERIOR TRIM CONFIG-CLOTH, LEVEL 1, JET BLACK
H1Y	INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK
H2G	INTERIOR TRIM CONFIG-VINYL, LEVEL 1, JET BLACK
H2U	INTERIOR TRIM CONFIG-LEATHER, LEVEL 3, JET BLACK
H2X	INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, JET BLACK
HS1	ALERT-SAFETY HAPTIC SEAT
HV5	INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, GIDEON/VY DK ATMOSPHERE
HVC	INTERIOR TRIM CONFIG-LEATHER, LEVEL 1, GIDEON/VY DK ATMOSPHERE
HVD	INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK/KALAHARI
HVE	INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, GIDEON/VY DK ATMOSPHERE
HVG	INTERIOR TRIM CONFIG-LEATHER, LEVEL 3, JET BLACK / UMBER

RPO	Description
HVH	INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, MED DARK ASH GRAY / VY DK ATMOSPHERE
IOR	RADIO-INFOTAINMENT SYSTEM - 3.X LOW HMI, MIDLEVEL CONNECTIVITY 3.X
IOS	RADIO-INFOTAINMENT SYSTEM - 3.X MID/ HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, MID SD NAV CAPABLE
IOT	RADIO-INFOTAINMENT SYSTEM - 3.X MID/ HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, PREMIUM SD NAV
J61	BRAKE SYSTEM-POWER, FRT & RR DISC, ABS, 17" (DNU NEXT NEW MAJOR)
JBP	BRAKE LINING WEAR SY-LIFE SPAN PROGNOSTIC INDICATOR
JHD	BRK APL CTRL FEATURE-HILL DESCENT, GEAR HOLD
JL1	BRK APL CTRL FEATURE-INTEGRATED TRAILER BRAKE
K05	HEATER ENG-BLOCK
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
K47	AIR CLEANER-HIGH CAPACITY
K4C	CHARGER-INDUCTIVE PORTABLE WIRELESS DEVICE (DNU SEE BFO)
KA1	HEATER SEAT FRT-DRVR & PASS (DNU NEXT NEW MAJOR)
KA6	HEATER SEAT-REAR (DNU NEXT NEW MAJOR)
KC4	COOLING SYSTEM-ENG OIL
KC5	RECEPTACLE-ELECTRICAL, ACCESSORY (DNU NEW/MAJOR - USE KH8)
KC9	RECEPTACLE PUBX-ELECTRICAL, 110 VOLT
KCA	RECEPTACLE PUBX-ELECTRICAL, 230 VOLT
KI3	STEERING WHEEL HEAT-AUTOMATIC
KI4	RECEPTACLE I/P-ELECTRICAL, 110 VOLT
KI5	RECEPTACLE I/P-ELECTRICAL, 230 VOLT
KL9	ENG CONTROL-STOP/START SYS, CONVENTIONAL AT, CONVENTIONAL MT OR BRAKE RELEASE LATE RESTART
KNP	COOLING SYSTEM-TRANS, HD
KPA	RECEPTACLE-ELECTRICAL, FRT CONSOLE RR, 12 VOLT
KQV	HEATER-SEAT, VENTED, FRT (DO NOT USE NEXT NEW MAJOR, USE KU9)
KSG	CRUISE CONTROL-AUTOMATIC, ADAPTIVE, WITH STOP/GO
KW5	GENERATOR-220 AMP
KW7	GENERATOR-170 AMP
L3B	ENGINE-GAS, 4 CYL, L4, 2.7L, SIDI, VVT, TURBO, DOHC, ALUM
L82	ENGINE-GAS, 8 CYL, 5.3L, V8, DI, AFM, ALUM, GEN 5, VAR 1

RPO	Description
L84	ENGINE-GAS, 8 CYL, 5.3L, V8, DI, DFM, ALUM, GEN 5
L87	ENGINE-GAS, 8 CYL, V8, 6.2L, DI, DFM, ALUM, GEN 5
LM2	ENGINE-DIESEL, 6 CYL, 3.0L, CRI, L6, DOHC, TURBO, VGT, ALUM, CSS50V, VAR. 1
MAH	MARKETING AREA-US, PUERTO RICO/USVI
MAM	MARKETING AREA-MIDDLE EAST
MAY	MARKETING AREA-ANDEAN (SOUTH AMERICA 2)
MBB	MARKETING AREA-AUSTRALIA/NZ
MBC	MARKETING AREA-CANADA
MCR	RECEPTACLE-MEMORY CARD (DO NOT USE NEXT NEW MAJOR)
MCX	MARKETING AREA-MEXICO
MCZ	PORT, MULTI ELEK DEV-USB (DO NOT USE NEXT NEW MAJOR, SEE BFO)
MQB	TRANSMISSION-AUTO 10 SPD, 10L80, ATSS, CPA, GEN 2
MQE	TRANSMISSION-AUTO 8 SPD, 8L90, ATSS, CPA, GEN 1
MSL	PLANT CODE-SILAO, MEXICO
MYC	TRANSMISSION-AUTO 6 SPD, HMD, 6L80
N01	LOCK CONTROL-FUEL PLUG
N06	STEERING COLUMN LOCK-ELECTRICAL
N10	EXHAUST SYSTEM-DUAL
N33	STEERING COLUMN-TILT TYPE
N37	STEERING COLUMN-TILT, TELESCOPING
NB5	EXHAUST SYSTEM-SINGLE (DO NOT USE NEXT NEW MAJOR, USE NC2)
NE1	CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION
NHT	PERFORMANCE PACKAGE-ENHANCED TOWING
NK5	STEERING WHEEL-STANDARD (DNU NEXT NEW MAJOR)
NP0	TRANSFER CASE-ACTIVE, SINGLE SPEED,SWITCH ACTIVATED,ALUM
NP5	STEERING WHEEL-LEATHER WRAPPED (DNU NEXT NEW MAJOR)
NQH	TRANSFER CASE-ACTIVE, TWO SPEED, SWITCH ACTIVATED, ALUM
NSS	IDENTIFICATION-NOT EQUIPPED WITH STOP/START SYSTEM (DNU AFTER MY22)
NTB	EMISSION SYSTEM-FEDERAL, TIER 3
NUC	EMISSION SYSTEM-CALIFORNIA, ULEV50
NUF	EMISSION SYSTEM-CALIFORNIA, ULEV125
NZH	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 8
NZJ	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 9

RPO	Description
NZM	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 10
NZP	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 12
NZQ	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 15
NZZ	SALES PACKAGE-SKID PLATE, "OFF ROAD" SPORT
PTT	TRAILER TIRE PRESSUR-MANUAL LEARN
PZ8	IMAGE ADJUSTMENT-HITCH VIEW
PZX	WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 2
Q5U	WHEEL-17 X 8.0, J, ALUMINUM, DESIGN 2
QAB	TIRE ALL-275/60R20 SL 115S BW AL2
QAE	TIRE ALL-275/60R20 SL 115S BW AT
QAQ	TIRE SPARE-255/80R17 SL 115S BW SPR
QBN	TIRE ALL-255/70R17 SL 112S BW ALS VAR 1
QBR	TIRE SPARE-255/70R17 SL 112S BW ALS VAR1
QDF	TIRE ALL-265/65R18 SL 114T BW ALS VAR 1
QDS	TIRE ALL-265/65R18 SL 114T WOL AT VAR 1
QDV	TIRE ALL-265/70R17 SL 115S BW AT VAR 1
QFV	TIRE ALL-LT265/60R20 C 110/107S BW OOR, VAR 1
QK1	GATE TYPE-PUBX END STANDARD
QK2	GATE TYPE-PUBX END ENHANCED
QT2	GATE FUNCTION-MANUAL
QT5	GATE FUNCTION-MANUAL ASSIST POWER RELEASE
QT6	GATE FUNCTION-POWER
R3O	TIRE ALL-LT275/65R18 C 113/110Q BW OOR, VAR1
R7O	SEAT RR-SPLIT, FOLDING, BASE STORAGE
R88	ACCESSORY-ILLUMINATED EMBLEM - EXTERIOR - DESIGN 2
RBR	WHEEL-22 X 9.0, J, STEEL, DESIGN 1
RC5	TIRE ALL-LT265/70R17 C 112Q BW AT
RCP	ACCESSORY TIRE-TIRE ALL - LT275/ 65R18 C 113/110Q BW OOR VAR1
RD1	WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 6
RD2	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 2
RD3	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 3
RD4	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 4
RD5	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 5
RD6	WHEEL-17 X 8.0, J, STEEL, DESIGN 2
RDI	ACCESSORY-KEYLESS ENTRY
RHM	TIRE SPARE-LT265/70R17 C 112Q BW AT
RIA	ACCESSORY-FLOOR LINER - CONTOURED

RPO	Description
RIK	ACCESSORY-BADGE - EXTERIOR, PACKAGE, DESIGN 1
RIN	ACCESSORY-BADGE - EXTERIOR, PACKAGE, DESIGN 2
RM7	WHEEL SPARE-17 X 8.0, J, STEEL, DESIGN 1
RN2	ACCESSORY-ILLUMINATED EMBLEM - EXTERIOR - DESIGN 1
RPP	WHEEL-17 X 8.0, J, STEEL, DESIGN 4
RPS	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 13
RT5	WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 1
RTL	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 1
RVA	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 1
RVG	ACCESSORY-ADAPTER - TRAILER HARNESS
RVQ	ACCESSORY-ASSIST STEPS - TUBULAR - OVAL - BLACK
RVS	ACCESSORY-ASSIST STEPS - TUBULAR - ROUND - BLACK
RW9	ACCESSORY-BED STORAGE BOX - SIDE FULL LENGTH - COMPOSITE
RWL	CHASSIS DRIVE LINE-REAR WHEEL DRIVE (RWD)
RWR	ACCESSORY-CAMERA - REAR VISION
RWS	ACCESSORY-FLOOR MATS - CARPET
RXC	ACCESSORY-AIR, POLLUTANT, ODOR, FINE DUST, ALLERGEN
RXH	ACCESSORY-CENTER CAP - WHEEL - DESIGN 1
RXJ	ACCESSORY-CENTER CAP - WHEEL - DESIGN 2
RXQ	ACCESSORY-CONVENIENCE NET - BED MOUNTED
RYT	ACCESSORY-FIRST AID KIT
S08	ACCESSORY-HIGHWAY SAFETY KIT
S0M	ACCESSORY-ILLUMINATED DOOR SILLS
S0P	ACCESSORY-INSERT - FLOOR CONSOLE
S0T	ACCESSORY-INTERIOR TRIM KIT - ALTERNATE FINISH 1
S0Y	ACCESSORY-LAMPS - CARGO AREA
S1O	ACCESSORY-CONTAINER - LOCKABLE STORAGE - INTERIOR
S1V	ACCESSORY-HEADPHONES - RSE
S2B	WHEEL SPARE-17 X 7.0, J, ALUMINUM, DESIGN 1
S3I	ACCESSORY-LAMPS - PERIMETER ILLUMINATION
S3U	ACCESSORY-LAMP KIT - FRONT FOG
S41	ACCESSORY-LINER - WHEEL HOUSE
S47	ACCESSORY-LUG NUTS
S4X	ACCESSORY-MIRROR COVERS/SKULL CAPS - ALTERNATE FINISH - PAINTED

RPO	Description
S4Z	ACCESSORY-MIRRORS - TRAILER EXTENSION
S6L	ACCESSORY-PROTECTOR - ROCKER PANEL
S6N	ACCESSORY-RECEIVER COVER - TRAILER HITCH
S6P	ACCESSORY-REMOTE START KIT
S6Z	ACCESSORY-SEAT COVER - TAILORED - ALTERNATE MATERIAL
SAF	LOCK-SPARE TIRE, HOIST SHAFT
SB1	ACCESSORY-SPLASH GUARDS - FLAT
SB7	ACCESSORY-DECAL PACKAGE - DESIGN 1
SB9	ACCESSORY-DECAL PACKAGE - DESIGN 2
SBY	ACCESSORY-SPORT BAR - BED MOUNTED - DESIGN 1
SD5	ACCESSORY-TIRE PRESSURE MONITOR
SDA	ACCESSORY-TOW HOOKS
SDE	ACCESSORY-TRAILER HITCH - REMOVABLE
SE5	ACCESSORY-WHEEL - 18" - ALUMINUM - DESIGN 2
SEH	ACCESSORY-WHEEL - 20" - ALUMINUM - DESIGN 1
SES	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 1
SEU	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 2
SEV	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 3
SEW	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 4
SEZ	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 6
SF0	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 7
SF1	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 8
SF5	ACCESSORY-WHEEL FLARES - ALTERNATE DESIGN - MOLDED COLOR
SF6	ACCESSORY-WHEEL FLARES - ALTERNATE DESIGN - PAINTED
SF8	ACCESSORY-DECAL PACKAGE - DESIGN 3
SFE	ACCESSORY-WHEEL LOCKS
SFJ	ACCESSORY-WINDOW SHADES - REFLECTIVE
SFZ	ACCESSORY-EMBLEM - EXTERIOR - DESIGN 1
SG3	ACCESSORY-SPRINGS - SPORT SUSPENSION
SGM	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 9
SHD	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 10

RPO	Description
SIE	ACCESSORY-PUBX TIERED STORAGE
SIL	ACCESSORY-RSE - PORTABLE MEDIA CONNECTIVITY PKG - W/INTEGRATED POWER
SJ9	ACCESSORY-GRILLE / GRILLE INSERTS - ALTERNATE FINISH 1
SJB	ACCESSORY-GRILLE / GRILLE INSERTS - ALTERNATE FINISH 3
SKY	ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 1
SL7	ACCESSORY-PUBX LADDER / UTILITY RACK STANCHIONS
SMF	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 11
SNR	SEAT RR-SPLIT, FOLDING, DELUXE STORAGE
SNS	ACCESSORY-DECAL PACKAGE - DESIGN 28
SPY	ACCESSORY-LUG NUTS - ALT FINISH
SPZ	ACCESSORY-WHEEL LOCKS - ALT FINISH
SR3	ACCESSORY-RSE - DUAL HEADREST DISPLAY W/WIRELESS CONNECTIVITY & DVD
STH	SALES PACKAGE-RALLY 2
SUR	ACCESSORY-TRAILER TIRE PRESSURE MONITOR
T3U	LAMP FRT FOG-FRT FOG
TDM	MODE TEEN DRIVER-SETTINGS, INFOTAINMENT
THS	TRAILERING ASSIST-GUIDELINES
TQ5	HEADLAMP HIGH BEAM-AUTO CONTROL
TRO	ACCESSORY-CAMERA PKG - TRAILERING AUX MOUNTED
TT0	ACCESSORY-TRAILERING HOOKUP ASSIST
TUF	ORNAMENTATION-EMBLEM, "TEXAS EDITION"
U12	LAMP-EXTR, OSRV MIRROR, TASK
U19	SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER
U1D	INDICATOR-TRAILER INFORMATION
U2J	DIGITAL AUDIO SYSTEM-S-BAND - NONE
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U2L	RECEPTION-HD
U73	ANTENNA-FIXED, RADIO
U95	SPEAKER SYSTEM-2, BASE
UD5	PARK ASSIST-FRONT AND REAR
UD7	PARK ASSIST-REAR
UDC	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (ONE COLOR GRAPHIC)
UDD	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR STANDARD GRAPHIC)
UDU	PROVISIONS-REAR CAMERA PREP

RPO	Description
UE0	COMMUNICATION SYSTEM-VEHICLE - NONE (DO NOT USE NEXT NEW MAJOR)
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UE4	SENSOR INDICATOR-FOLLOWING DISTANCE
UEU	SENSOR INDICATOR-FORWARD COLLISION ALERT
UF2	LAMP-CARGO
UFG	REAR CROSS TRAFFIC-ALERT
UG1	OPENER-GARAGE DOOR, UNIVERSAL
UGA	HOOK-TOW, RED
UHL	VEHICLE-U-HAUL
UHN	WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 3
UHS	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR ENHANCED GRAPHIC)
UHX	LANE ACTIVE SAFETY-KEEP ASSIST
UHY	COLL IMMINENT BRK-LOW SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST
UIJ	INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 8", WVGA 800X480P
UIK	INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 8", WXGA 1280X768P
UIR	INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 7", WVGA 800X480P
UJM	TIRE PRESS INDICATOR-MANUAL LEARN
UK3	CONTROL-STEERING WHEEL, ACCESSORY
UKC	SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED
UKJ	PED DETECTION FRT-BASIC, PEDESTRIANS
UL8	FREQUENCIES-SAUDI ARABIAN
ULK	ACCESSORY-TOW HOOKS - RED
UMN	SPEEDOMETER-INST, MILES & KILO, MILES ODOMETER
UQA	SPEAKER SYSTEM-PREMIUM AUDIO, BRANDED AMPLIFIER
UQF	SPEAKER SYSTEM-STANDARD AUDIO
URC	SWITCH-FLEXRIDE MODE SYSTEM
USS	RECEPTACLE-USB CHARGE PORT (DO NOT USE NEXT NEW MAJOR, SEE BFO)
UTJ	THEFT DETERENT-ELECTRICAL, UNAUTHORIZED ENTRY
UV6	HEAD UP DISPLAY-WINDSHIELD
UVB	VISION-REAR VIEW, MONO, HD DIGITAL
UVC	VISION-REAR VIEW, MONO, ANALOG
UVI	VISION-270 & REAR TRAILER VIEW, MONO, HD DIGITAL(DO NOT USE AFTER MY2022)
UVN	VISION AUXILIARY-CARGO BED

RPO	Description
UVS	VISION-360 & TRAILER VIEW, MONO, HD DIGITAL (DO NOT USE AFTER MY2022)
V46	BUMPER FRT-CHROME
V76	HOOK-TOW
V78	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT (ENGLISH TEXT)
V87	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - GULF STATES ORGANIZATION
V8C	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT (SPANISH TEXT)
V8D	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS
V8E	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - CANADA CMVSS
VAV	ACCESSORY-FLOOR MATS - ALL WEATHER
VB5	BUMPER FRT-COLOR
VBJ	ACCESSORY-UNDERSEAT STORAGE
VBN	ACCESSORY-PUBX CARPET
VBR	ACCESSORY-PUBX RUBBER MAT
VBX	LANGUAGE LABEL-ARABIC
VEX	KIT-SAFETY
VGC	PROTECTOR-FILM, PAINT ETCH PREVENTIVE
VH6	BUMPER FRT-BLACK
VJG	BUMPER RR-BLACK
VJH	BUMPER RR-CHROME
VK3	LICENSE PLATE FRONT-FRT MOUNTING PKG
VKU	ACCESSORY-MIRROR CAPS - CHROME
VKW	ACCESSORY-ORGANIZER - FRONT CONSOLE
VKY	ACCESSORY-DOOR HANDLES - ALTERNATE FINISH - CHROME
VLQ	HOOK-TOW, CHROME
VMK	ACCESSORY-CARGO MANAGEMENT SYSTEM RAILS
VNI	ACCESSORY-REAR FASCIA APPLIQUE - ALTERNATIVE FINISH 1
VOZ	ACCESSORY-TONNEAU - RR COMPT - HARD FOLDING - ALT DESIGN
VPB	ACCESSORY-TONNEAU - RR COMPT - VINYL W/ INTEGRAL CROSSBOW SUPPORTS
VPH	VEHICLE PREPARATION-OVERSEAS DELIVERY
VPI	ACCESSORY-REAR FASCIA APPLIQUE - ALTERNATIVE FINISH 2
VQK	ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED
VQM	ACCESSORY-ASSIST STEPS - CHROME
VQO	ACCESSORY-ASSIST STEPS - BLACK

RPO	Description
VQY	ACCESSORY-TOW HOOKS - CHROME
VQZ	ACCESSORY-EXHAUST TIP - DESIGN 1
VST	ACCESSORY-SILL PLATES - ALTERNATE DESIGN 1
VSX	LABEL-TOWING
VT2	ACCESSORY-ASSIST STEPS - ALTERNATE FINISH
VT5	BUMPER RR-COLOR KEYED
VT7	OWNERS MANUAL-ENGLISH LANGUAGE
VTA	ACCESSORY-EXHAUST TIP - DESIGN 2
VTI	SHUTTERS-FRONT GRILLE, ACTIVE, UPR
VUK	ACCESSORY-TAILGATE LINER - PUBX
VV4	COMMUNICATION EQUIP-MOBILE INTERNET CONNECTIVITY
VW9	ACCESSORY-CENTER CAP - WHEEL - DESIGN 3
VWD	ACCESSORY-CENTER CAP - WHEEL - DESIGN 4
VXH	ACCESSORY-ASSIST STEPS - TUBULAR - CHROME - OVAL
VXJ	ACCESSORY-ASSIST STEPS - TUBULAR - CHROME - ROUND
VXT	VEHICLE TYPE-INCOMPLETE
VXW	ACCESSORY-ASSIST STEPS - MOLDED
VYU	PROVISIONS-SNOW PLOW PREP
VZX	ACCESSORY-PUBX BEDLINER
W09	ACCESSORY-TAILGATE GAP COVER
W1V	ACCESSORY-FLOOR MATS - PREMIUM CARPET - ALT DESIGN
W2D	ACCESSORY-CARGO NET
WBC	ACCESSORY-EXHAUST UPGRADE
WGQ	SALES PACKAGE-REDLINE
WJP	SALES PACKAGE-MIDNIGHT EDITION
WLD	WINDOW CONTROL-REMOTE EXPRESS DOWN, ALL WINDOWS
WMI	SHUTTERS-FRONT GRILLE, ACTIVE, UPR AND LWR
WMW	VIN MODEL YEAR-2022
WPC	SALES PACKAGE-COMFORT AND CONVENIENCE
WPF	SALES PACKAGE-PREFERRED
WPQ	SALES PACKAGE-PROTECTION
X31	APPEARANCE PACKAGE-GMC "X31 OFF ROAD"
X88	MARKET BRAND-CHEVROLET
XCE	TIRE ALL-275/50R22 SL 111T BW AL2 VAR 1
XCK	TIRE ALL-265/65R18 SL 114T BW AT VAR1
XCQ	TIRE SPARE-265/70R17 SL 115S BW SPR VAR1
XD5	ACCESSORY TIRE-TIRE ALL-275/50R22 SL 111T BW AL2
XDF	ACCESSORY TIRE-TIRE ALL - 275/60R20 SL 115S BW AT
YF5	CERTIFICATION-EMISSION, CALIFORNIA
Z45	CHASSIS PACKAGE-CONTINUOUS DAMPING CONTROL
Z49	COUNTRY-CANADA
Z5X	MIRROR PROVISIONS-ARABIC LANGUAGE
Z60	CHASSIS PACKAGE-HIGH PERFORMANCE
Z71	CHASSIS PACKAGE-"OFF ROAD"
Z7X	CHASSIS PACKAGE-"OFF ROAD" 2 INCH LIFT
Z82	TRAILER PROVISIONS-SPECIAL EQUIPMENT, H.D.
Z85	CHASSIS PACKAGE-INCREASED CAPACITY
Z88	MARKET BRAND-GMC
ZL3	SALES PACKAGE-CONVENIENCE
ZL6	SALES PACKAGE-TRAILER INTEGRATION
ZLA	SALES PACKAGE-INFOTAINMENT
ZLQ	SALES PACKAGE-LS FLEET
ZM7	SALES PACKAGE-CARBON EDITION
ZW9	BODY EQUIPMENT-BASE BODY OR CHASSIS

Section 2

Body Systems

Fixed and Moveable Windows 2-3
Schematic and Routing Diagrams 2-3
Moveable Window Schematics 2-4
Defogger Schematics 2-11
Description and Operation 2-12
Full-Cut Method Description 2-12
Power Windows Description and Operation 2-12
Rear Window Defogger Description and Operation 2-13
Stationary Window Description 2-14
Urethane Adhesive Description 2-14

Horns and Pedestrian Alerts 2-15
Schematic and Routing Diagrams 2-15
Horn Schematics 2-16
Description and Operation 2-17
Horns System Description and Operation 2-17

Lighting 2-18
Schematic and Routing Diagrams 2-18
Headlights/Daytime Running Lights (DRL) Schematics 2-19
Fog Lights Schematics 2-25
Exterior Lights Schematics 2-26
Interior Lights Schematics 2-41
Interior Lights Dimming Schematics 2-43
Description and Operation 2-47
Exterior Lighting Systems Description and Operation 2-47
Interior Lighting Systems Description and Operation 2-51

Vehicle Access 2-53
Schematic and Routing Diagrams 2-53
Door Lock/Indicator Schematics 2-54
Release Systems Schematics 2-58
Endgate Schematics 2-59
Hood Latch Schematics 2-63
Description and Operation 2-64
Door Ajar Indicator Description and Operation 2-64
Endgate Description and Operation (QT6) 2-66
Endgate Description and Operation (QT5 Without MultiPro Tailgate) 2-67
Endgate Description and Operation (QT5 With MultiPro Tailgate) 2-67
Hood Ajar Indicator Description and Operation 2-68
Power Door Locks Description and Operation 2-68

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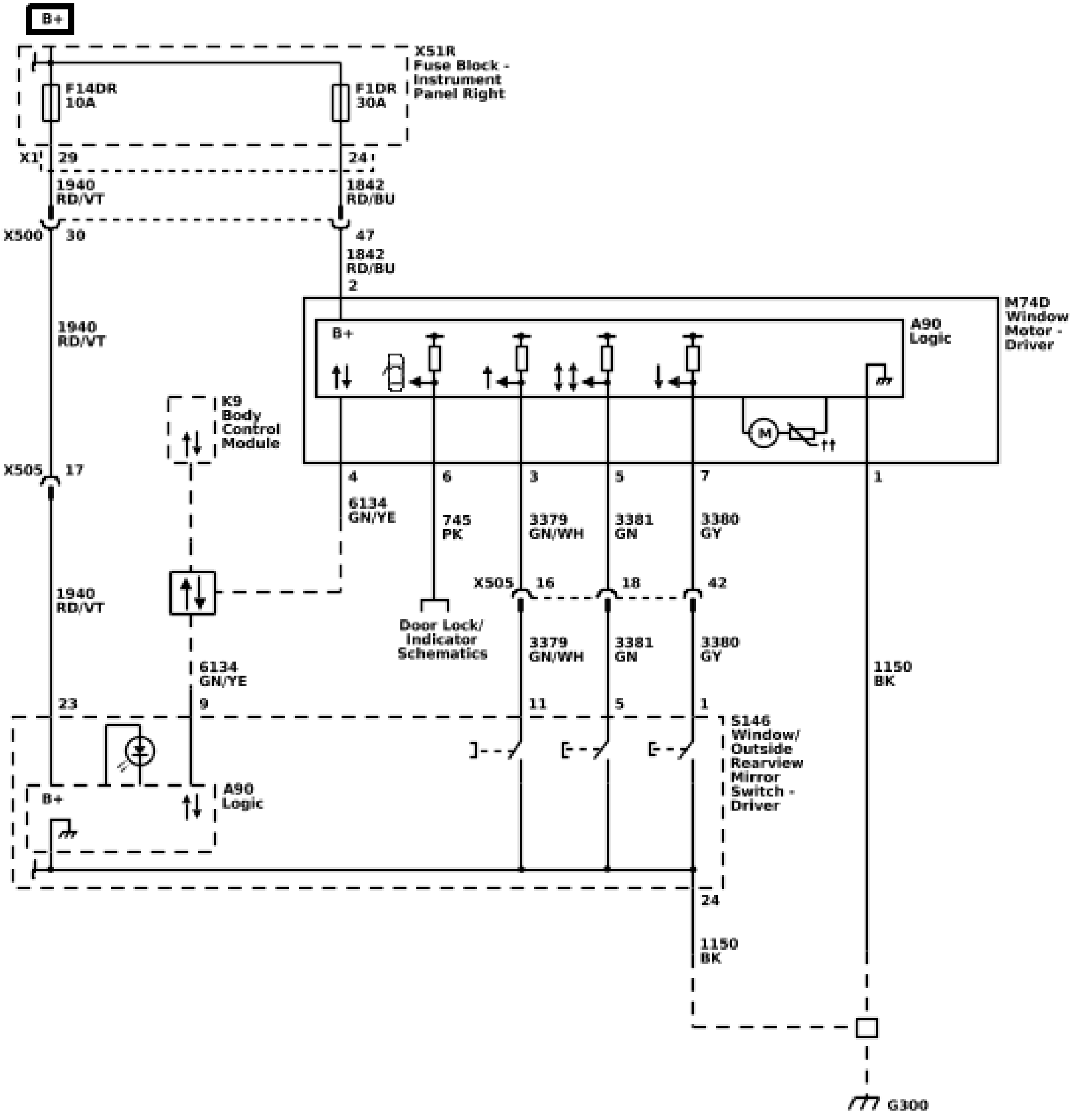
Fixed and Moveable Windows

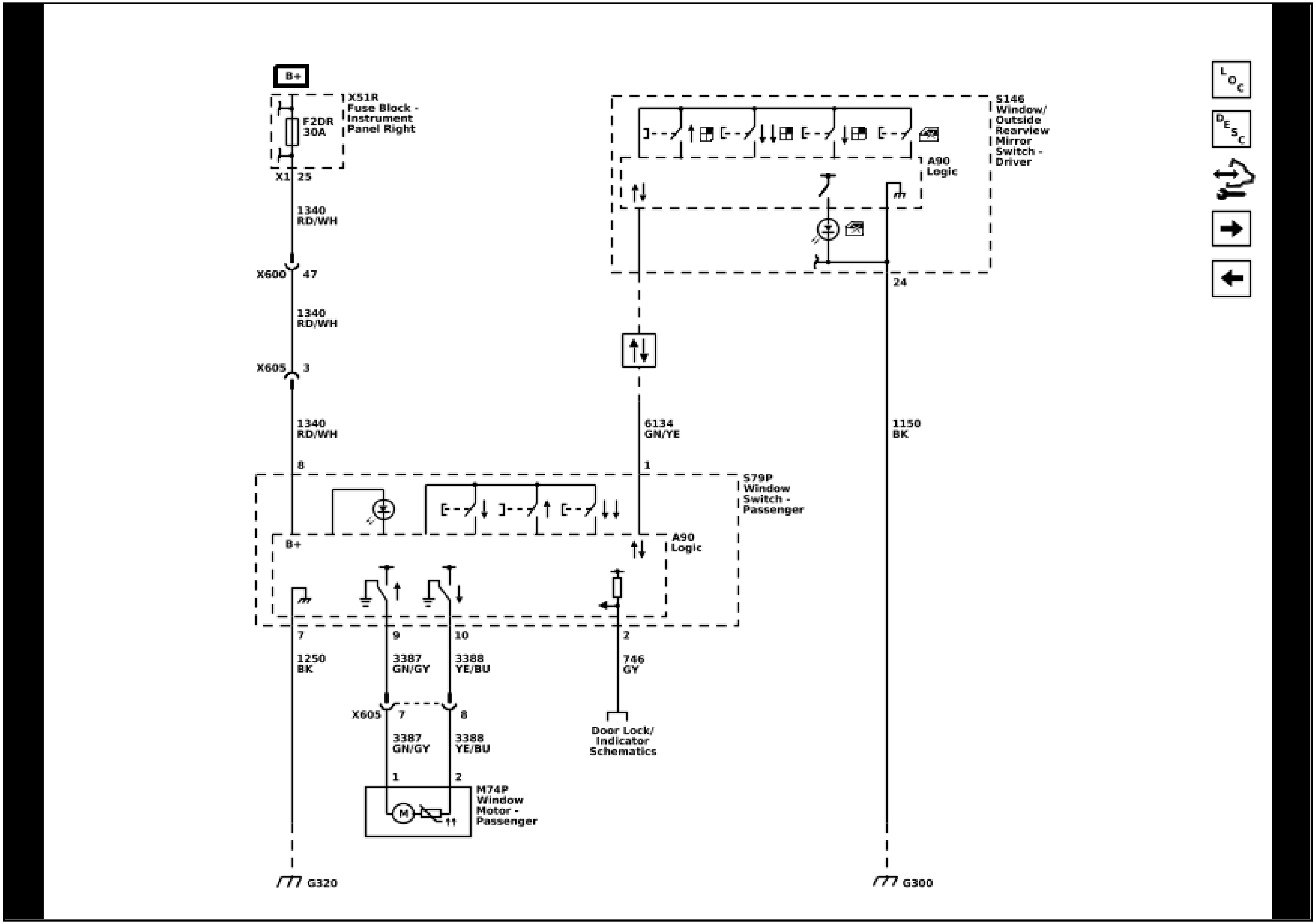
Schematic and Routing Diagrams

Moveable Window Schematics (Driver Window (AXG))


B+
X51R
Fuse Block -
Instrument
Panel Right
F14DR
10A
F1DR
30A
X1
29
24
1940
RD/VT
1842
RD/BU
X500
30
47
1842
RD/BU
2
1940
RD/VT
M74D
Window
Motor -
Driver
A90
Logic
B+
M
K9
Body
Control
Module
X505
17
4
6
3
5
7
1
6134
GN/YE
745
PK
3379
GN/WH
3381
GN
3380
GY
X505
16
18
42
1940
RD/VT
Door Lock/
Indicator
Schematics
3379
GN/WH
3381
GN
3380
GY
6134
GN/YE
1150
BK
23
9
11
5
1
S146
Window/
Outside
Rearview
Mirror
Switch -
Driver
A90
Logic
B+
24
1150
BK
G300

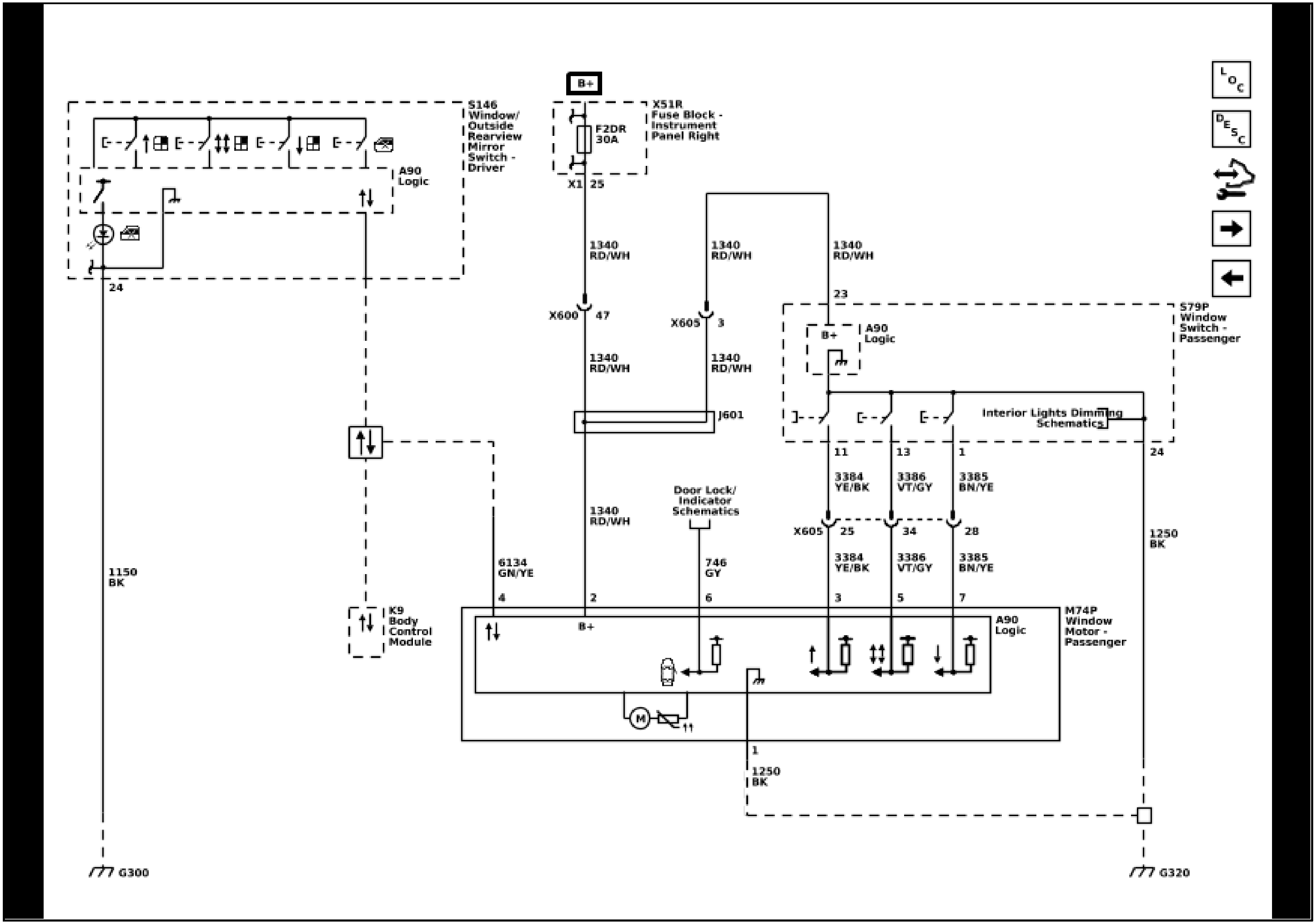
5501969

Moveable Window Schematics (Passenger Window (AED))


B+
X51R
Fuse Block -
Instrument
Panel Right
F2DR
30A
X1 25
1340
RD/WH
X600 47
1340
RD/WH
X605 3
1340
RD/WH
8
S146
Window/
Outside
Rearview
Mirror
Switch -
Driver
A90
Logic
24
6134
GN/YE
1150
BK
1
S79P
Window
Switch -
Passenger
B+
A90
Logic
7
9
10
2
1250
BK
3387
GN/GY
3388
YE/BU
746
GY
X605 7
8
3387
GN/GY
3388
YE/BU
Door Lock/
Indicator
Schematics
1
2
M74P
Window
Motor -
Passenger
M
G320
G300
LOC
DESC

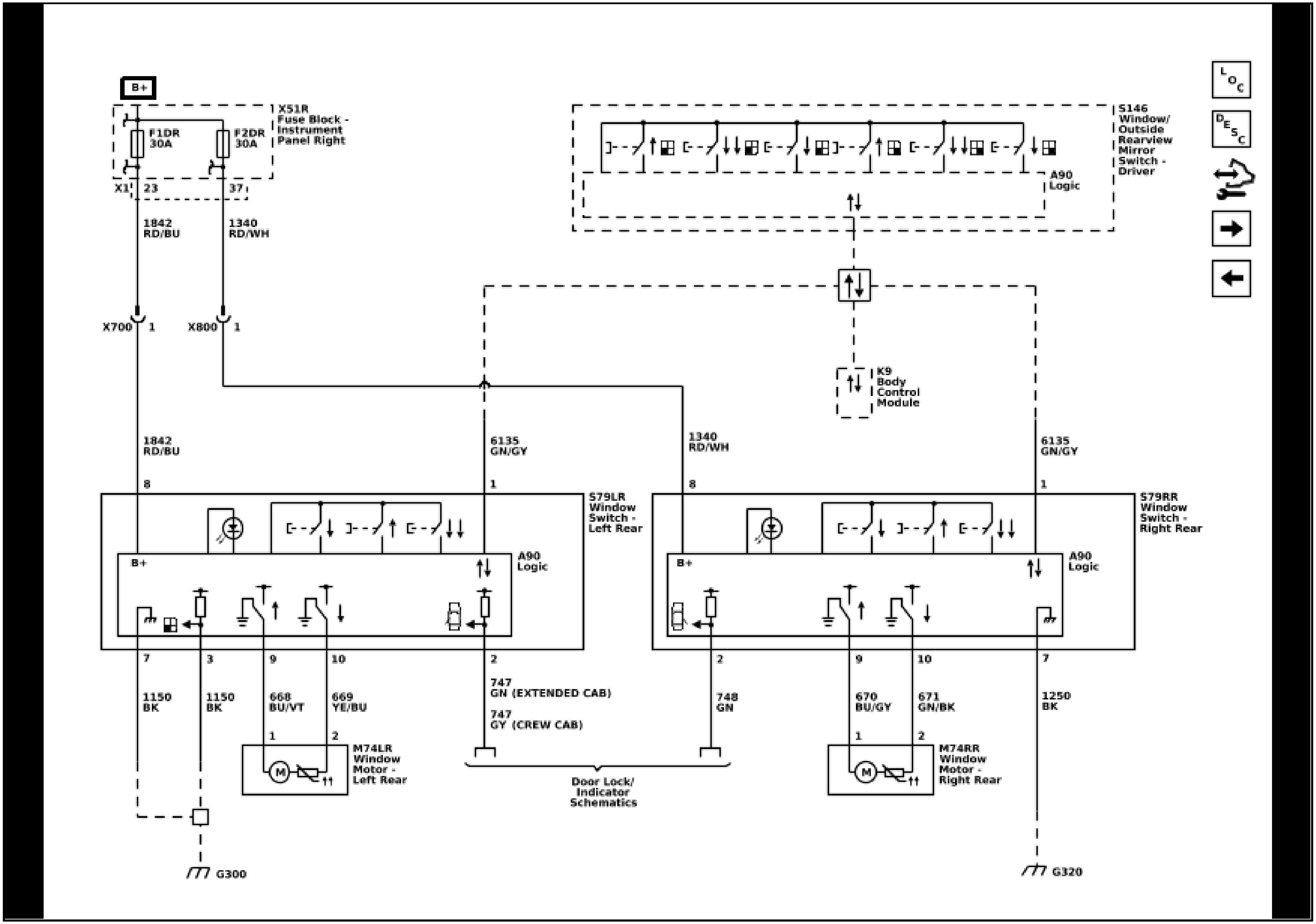
5501970

Moveable Window Schematics (Passenger Window (AEF))


S146
Window/
Outside
Rearview
Mirror
Switch -
Driver
A90
Logic
24
1150
BK
G300
K9
Body
Control
Module
B+
X51R
Fuse Block -
Instrument
Panel Right
F2DR
30A
X1 25
1340
RD/WH
X600 47
X605 3
1340
RD/WH
J601
6134
GN/YE
4
2
B+
Door Lock/
Indicator
Schematics
746
GY
6
23
A90
Logic
B+
S79P
Window
Switch -
Passenger
Interior Lights Dimming
Schematics
24
11
13
1
3384
YE/BK
3386
VT/GY
3385
BN/YE
X605 25
34
28
3
5
7
1250
BK
A90
Logic
M74P
Window
Motor -
Passenger
M
1
1250
BK
G320

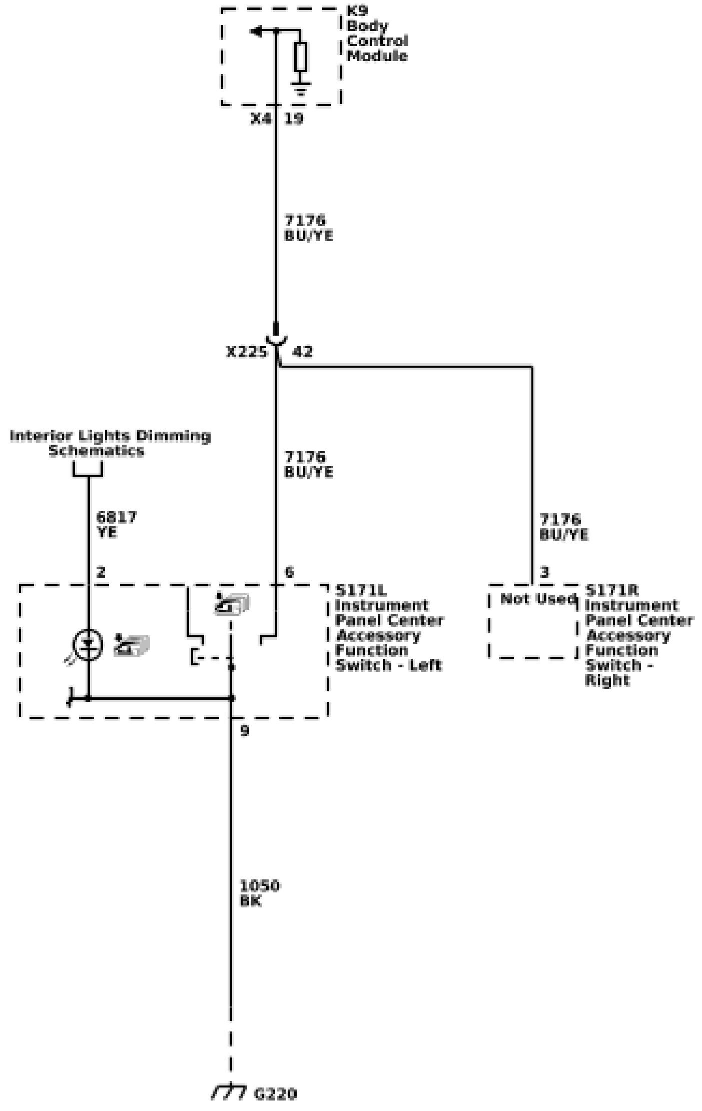
5501971

Moveable Window Schematics (Rear Windows (AEQ))


B+
X51R Fuse Block - Instrument Panel Right
F1DR 30A
F2DR 30A
X1
23
37
1842 RD/BU
1340 RD/WH
X700 1
X800 1
S146 Window/ Outside Rearview Mirror Switch - Driver
A90 Logic
K9 Body Control Module
1842 RD/BU
6135 GN/GY
1340 RD/WH
6135 GN/GY
8
1
8
1
S79LR Window Switch - Left Rear
A90 Logic
B+
S79RR Window Switch - Right Rear
A90 Logic
B+
7
3
9
10
2
2
9
10
7
1150 BK
1150 BK
668 BU/VT
669 YE/BU
747 GN (EXTENDED CAB)
747 GY (CREW CAB)
748 GN
670 BU/GY
671 GN/BK
1250 BK
1
2
M74LR Window Motor - Left Rear
Door Lock/ Indicator Schematics
1
2
M74RR Window Motor - Right Rear
G300
G320

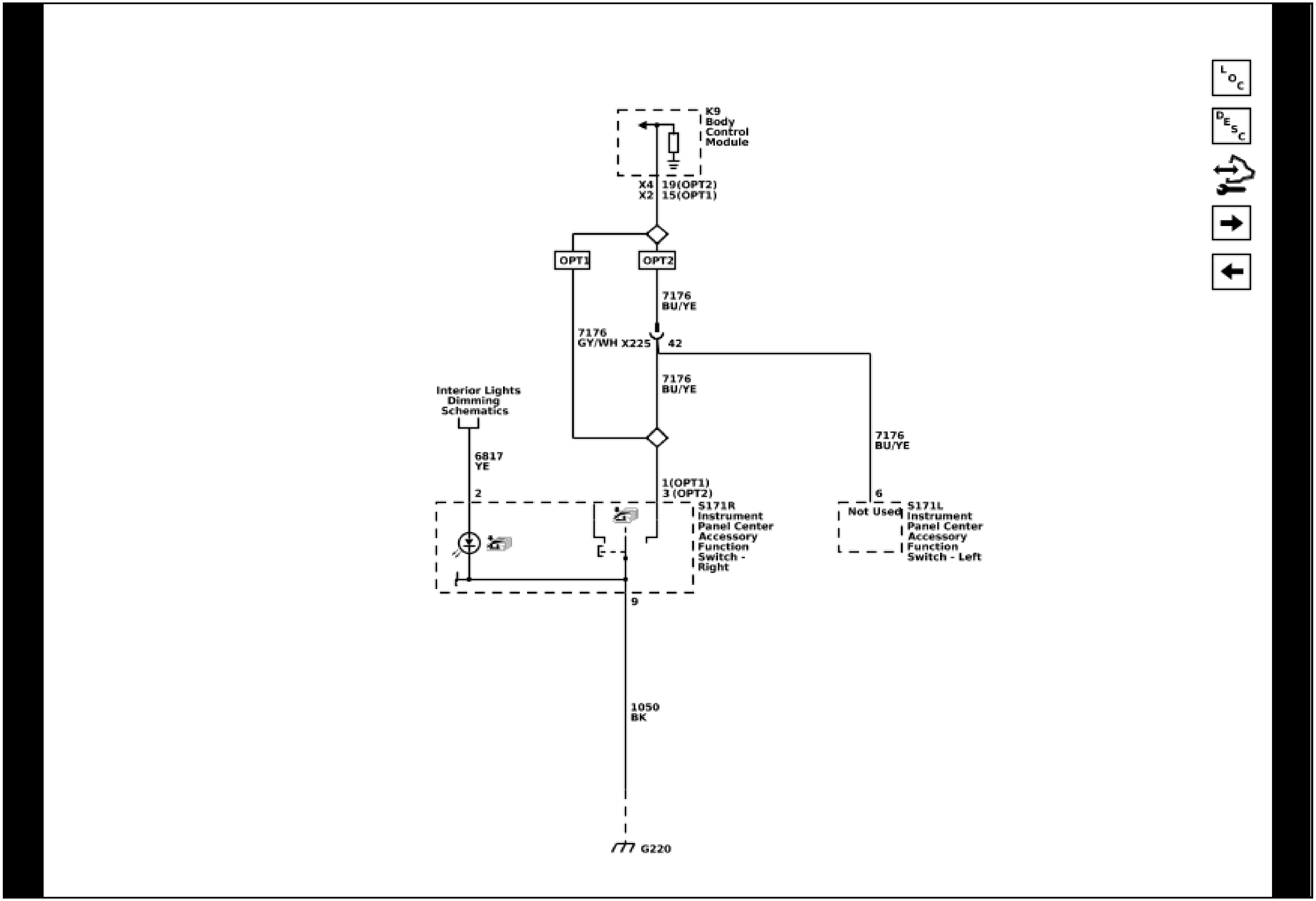
5501972

Moveable Window Schematics (Global Window Express Down Switch (WLD) (In Left IP Accessory Function Switch))


K9
Body
Control
Module
X4 19
7176
BU/YE
X225 42
7176
BU/YE
7176
BU/YE
Interior Lights Dimming Schematics
6817
YE
2
6
3
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
Not Used
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
9
1050
BK
G220

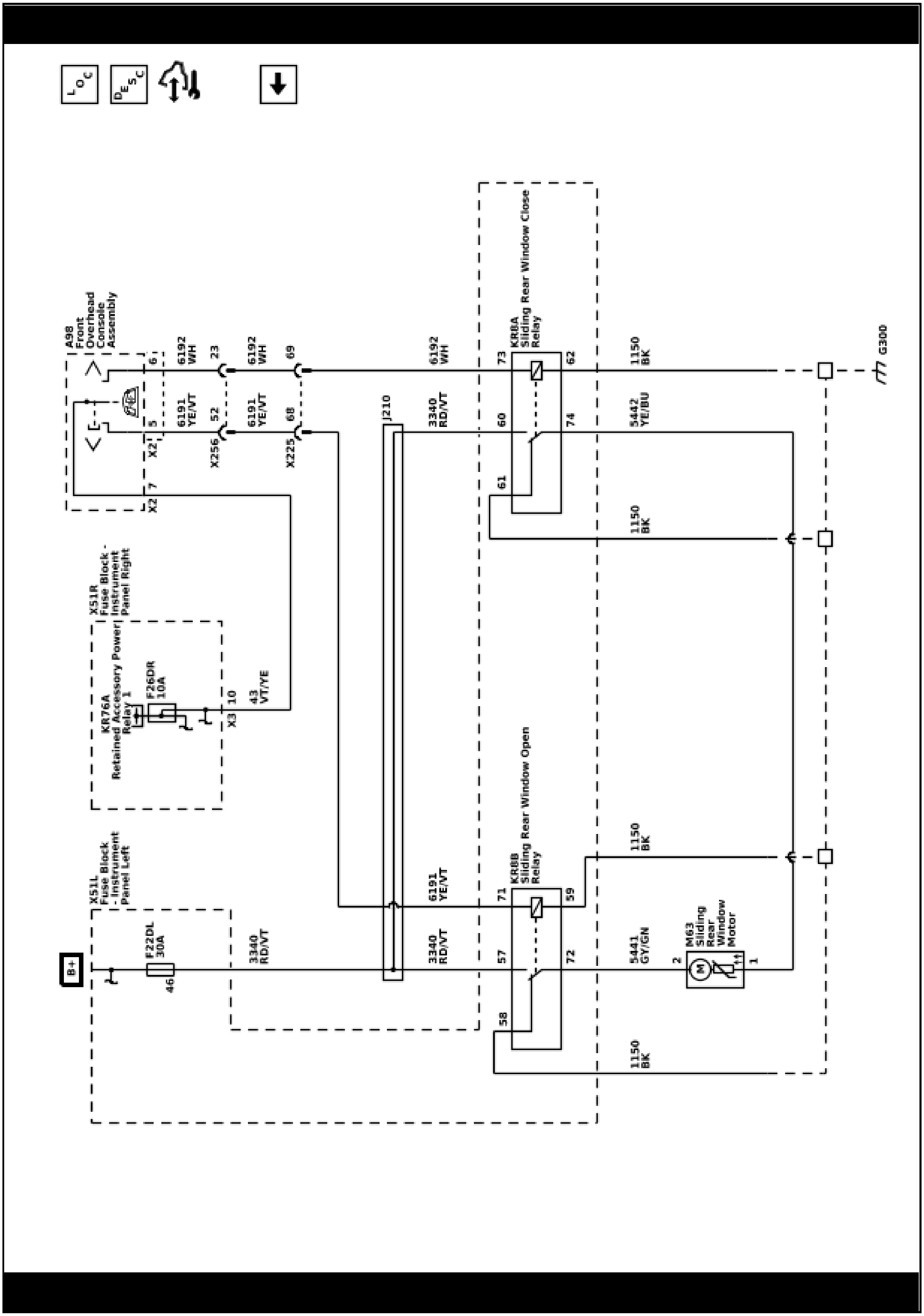
5501973

Moveable Window Schematics (Global Window Express Down Switch (WLD) (In Right IP Accessory Function Switch))


K9
Body
Control
Module
X4 19(OPT2)
X2 15(OPT1)
OPT1
OPT2
7176
BU/YE
7176
GY/WH
X225
42
7176
BU/YE
Interior Lights
Dimming
Schematics
6817
YE
7176
BU/YE
1(OPT1)
3 (OPT2)
2
6
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
Not Used
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
9
1050
BK
G220

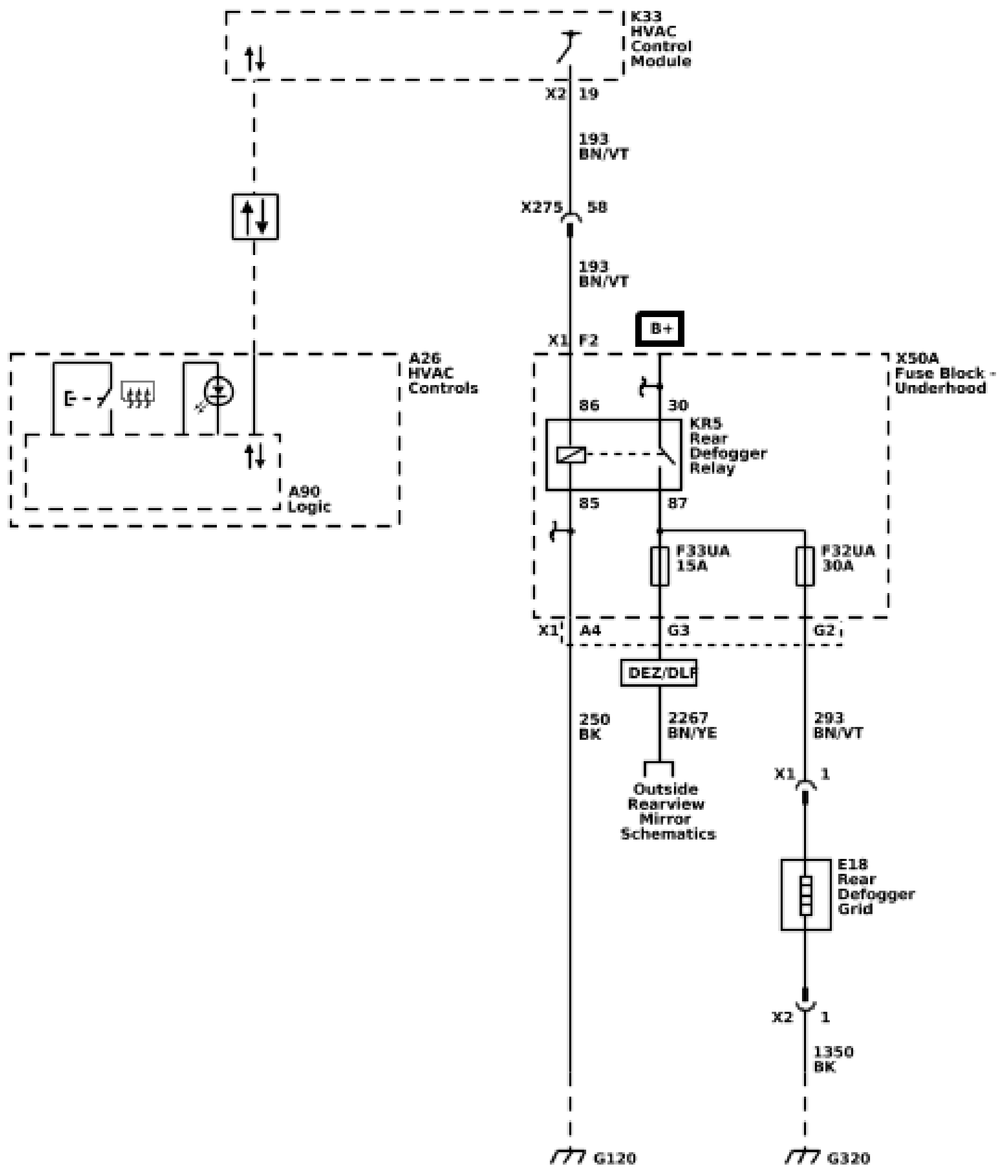
5501974

Moveable Window Schematics (Rear Sliding Window (A48))


L O C
D E S C
B+
X51L Fuse Block - Instrument Panel Left
F22DL 30A
46
3340 RD/VT
X51R Fuse Block - Instrument Panel Right
KR76A Retained Accessory Power Relay 1
F26DR 10A
X3 10
43 VT/YE
A98 Front Overhead Console Assembly
X2 7
X2 5
6
6191 YE/VT
6192 WH
X256
52
23
X225
68
69
J210
KR8B Sliding Rear Window Open Relay
71
57
58
59
72
KR8A Sliding Rear Window Close Relay
73
60
61
62
74
1150 BK
5441 GY/GN
5442 YE/BU
M63 Sliding Rear Window Motor
2
1
G300

5501975

Defogger Schematics (Defogger)


K33
HVAC
Control
Module
X2 19
193
BN/VT
X275 58
193
BN/VT
X1 F2
B+
A26
HVAC
Controls
A90
Logic
X50A
Fuse Block -
Underhood
86
30
KR5
Rear
Defogger
Relay
85
87
F33UA
15A
F32UA
30A
X1 A4
G3
G2
DEZ/DLF
250
BK
2267
BN/YE
293
BN/VT
Outside
Rearview
Mirror
Schematics
X1 1
E18
Rear
Defogger
Grid
X2 1
1350
BK
G120
G320

5501976

Description and Operation

Full-Cut Method Description

Note:

- If corrosion of the pinch-weld flange is present, or if sheet metal repairs or replacements are required, refinish the pinch-weld flange in order to present a clean, primer-only surface.
- If paint repairs are required, mask the flange bonding area, prior to applying the color coat, in order to provide a clean, primer-only surface.
- Appropriate materials for these primer applications are typically 2 component catalyzed products. Use materials such as BASF DE15®, DuPont 2610®, Sherwin-Williams PSE 4600 and NP70® and Martin-Semour 5120 ,5130® , PPG DP90LF SPIES/HECKER 3688/8590 – 3688/5150 – 4070/5090 STANDOX 11158/13320 – 14653/14980 products are approved for this application. Follow the manufacturer's directions for the mix, the application, and the drying times.
- After repairing the opening as indicated, use adhesive systems which meet GM Specification GM 3651G.

Use only the full cut method, also known in the field as full strip method, when installing windows.

This method includes the following:

- The replacement of a majority of the adhesive bead. Remove all but approximately 2 mm (3/64 in) of the existing bead of adhesive from the pinch-weld flange.
- Apply pinch-weld primer to any exposed painted areas on the pinch-weld flange.

No mounds or loose pieces of adhesive should remain on the pinch-weld flange. Do not remove all traces of adhesive.

Power Windows Description and Operation

Power Windows System Components

The power window system consists of the following components:

- Driver window/outside rearview mirror switch
- Passenger window switch
- Left rear window switch
- Right rear window switch
- Global express down window switch
- Window motors in each of the doors
- 30A Fuse
- Body control module (BCM)

Power Window System

This vehicle may be equipped with the following power window configurations:

- Driver door with express up and express down window motor
- Passenger door with express up and express down window motor
- Passenger door with express down only window motor
- Left rear door with express down only window motor
- Right rear door with express down only window motor

Driver and Passenger Express Up and Express Down Power Window Motors

The driver and passenger doors contains a window motor is smart motor that will detect excessive resistance while performing the express up function and automatically reverse direction to prevent injury to any occupants that may become trapped between the closing window and the door frame. The automatic reverse safety feature can be overridden by pulling and holding the window switch.

The logic circuit within the window motor monitors the up, down and express signal circuits which are normally equal to B+ voltage. When a switch is used on the window switch, the contacts close causing a voltage drop within the appropriate signal circuit. The window motor will detect the voltage drop and will command the window to move in the direction requested.

The driver window/outside rearview mirror switch communicates to the BCM by a serial data circuit. When the driver wishes to control the passenger window, the driver will use the appropriate switch on the driver window/outside rearview mirror switch. When this switch is used, a serial data message is sent to the BCM requesting the passenger window motor command, the BCM will then send a serial data message to the passenger window motor which will then move in the direction requested.

Passenger, Left Rear and Right Rear Express Down Only Window Motors

For the passenger, right rear and left rear doors, when their window switch is pressed in the down position, battery positive voltage is applied to their respective window motor control circuit and ground to the other window motor control circuit causing that window to open. When the individual window switch is pulled in the up position, voltage and ground is applied to the window motor in the opposite direction causing that window to close. The return path to ground is supplied through the inactive control circuit being normally grounded through the window switch.

The passenger and rear window switches communicates to the BCM by a serial data circuit. When the driver wishes to control the passenger, left rear or right rear window, the driver will use the appropriate switch on the driver window/outside rearview mirror switch. When this switch is used, a serial data message is sent to the BCM requesting a window motor command, the BCM will then send a serial data message to the appropriate door window switch which will then command that window to move in the direction requested.

Global Window Express Down Switch

The global express down switch (part of the instrument panel multifunction switch) may be used to commanded all windows to perform the express down function

Lockout Switch Feature

The driver window/outside rearview mirror switch contains a window lockout switch, when the driver presses the window lockout switch, a serial data message is sent to the BCM which will send a disable command to the rear window switches, deactivating them. The rear windows will still function normally from the switches on the driver window/outside rearview mirror switch.

Power Sliding Rear Window

NOTE: Power window lockout switch disables left rear and right rear passenger window switches only and has no effect on the operation of the power sliding window switch.

The power sliding rear window motor is controlled from the rear window OPEN/CLOSE switch through OPEN and CLOSE relays. The OPEN/CLOSE switch is supplied voltage from the body control module accessory voltage output circuit. When the switch is pressed in the OPEN or CLOSED position the OPEN or CLOSED relay coil will be supplied accessory voltage and energized through the appropriate relay control circuit. While the OPEN and CLOSE relays are in a de-energized state both motor control circuits will be closed to ground. When one of the relays is energized its motor control circuit will be closed to the battery voltage supply circuit and the other motor control circuit will remain grounded through the de-energized relay.

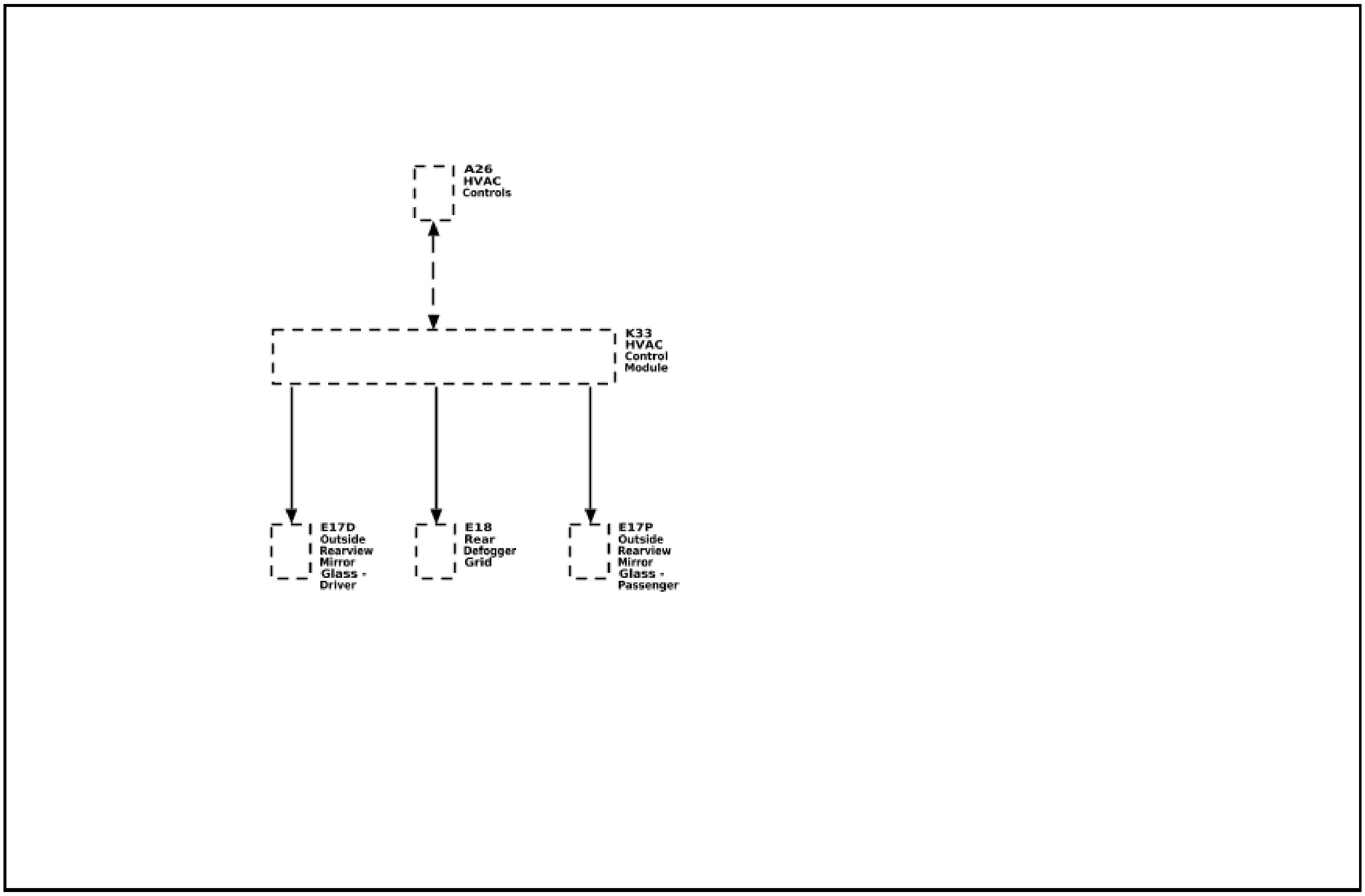
Rear Window Defogger Description and Operation

Rear Window Defogger System Components

The rear window defogger system consists of the following components:

- HVAC Control Module
- HVAC Controls
- Rear Defogger Relay
- Rear Defogger Grid
- Driver Outside Rearview Mirror
- Passenger Outside Rearview Mirror
- 40A Fuse

A26-K33-X50A Defogger Block Diagram



3511665

Rear Window Defogger Operation

The rear defog control system utilizes a single zone backlight design, driven with a single relay configuration. Additionally, up to two outside rear view mirrors can be heated if required. A switch for the customer to control the system is provided within the HVAC controls. Also included in the HVAC controls is an indicator to inform the customer with the current state of the system. The system is only operational when engine is running or during remote start.

Pressing the heated rear window switch causes the HVAC controls to send a serial data message to the HVAC control module requesting rear window defog operation. The HVAC control module upon receipt of the serial data message will provide voltage to the coil side of the rear defogger relay, this will energize the relay causing the relay switch contacts to close allowing B+ voltage to flow through the rear defogger grid control circuit to the rear defogger grid.

When the rear heated rear window switch is pressed and the engine is running, the rear window defogger grid will activate and will turn off automatically depending upon the vehicle speed (refer to owner’s manual for rear window defogger operation cycles)

Heated Mirrors

The heated mirrors are also controlled through the rear defogger relay. Whenever the rear window defogger is turned on battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

Stationary Window Description

Most stationary windows, specifically windshields, are retained to the body with urethane adhesive which adheres the window to the body, increasing structural integrity. The reinstallation of the windows with urethane adhesive requires complete replacement of the urethane adhesive bead, and is known as the full cut method.

Urethane Adhesive Description

For replacement of any adhesive-installed window, use the full cut method only.

Use an adhesive that is approved by GM, Specification GMW-15672.

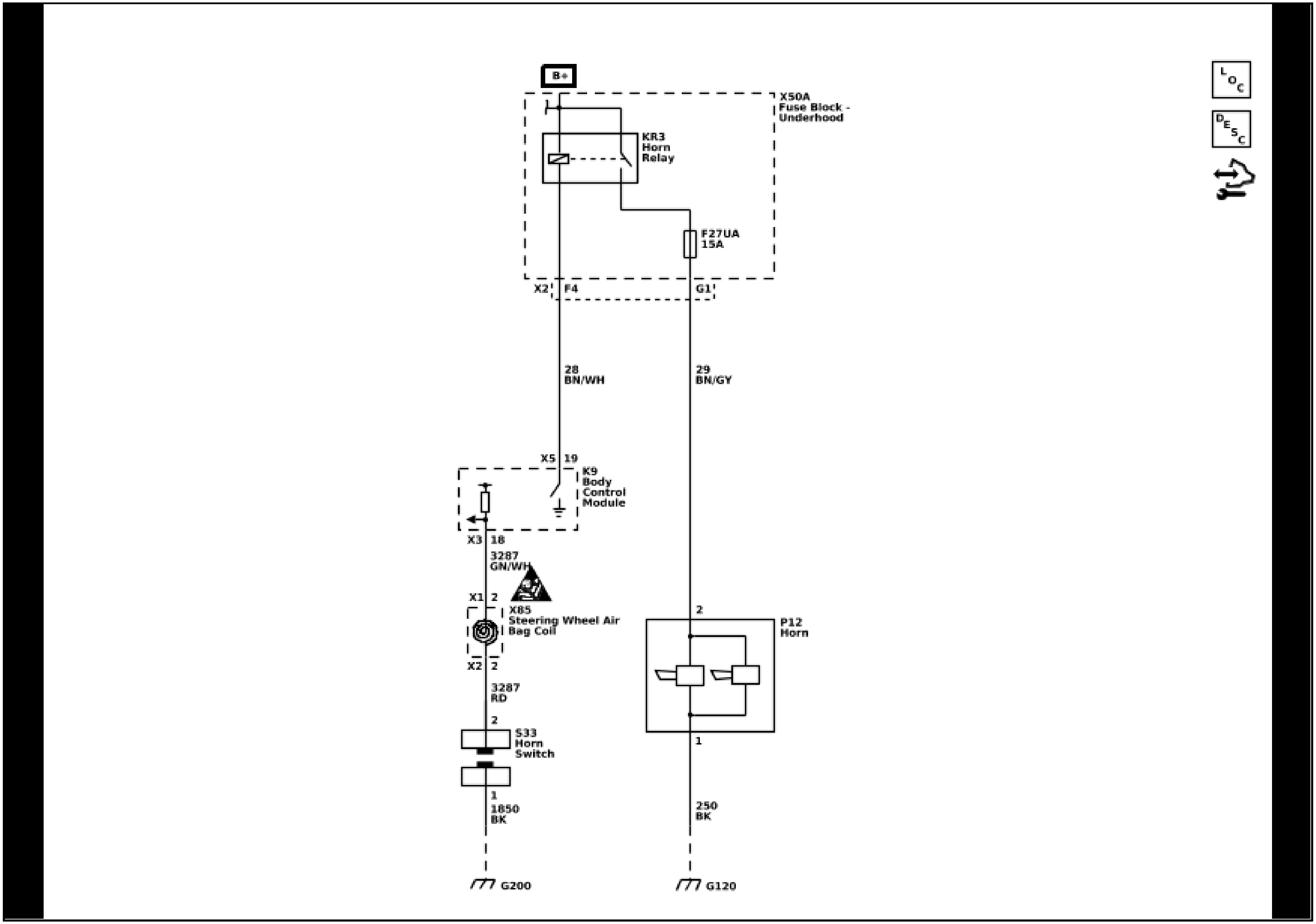
Use these materials based on specific manufacturer. Do NOT intermix primers or adhesives from one manufacturer to another.

Always follow the system manufacturers instructions for application, handling, and curing.

Horns and Pedestrian Alerts

Schematic and Routing Diagrams

Horn Schematics (Horn)


B+
X50A Fuse Block - Underhood
KR3 Horn Relay
F27UA 15A
X2 F4
G1
28 BN/WH
29 BN/GY
X5 19
K9 Body Control Module
X3 18
3287 GN/WH
X1 2
X85 Steering Wheel Air Bag Coil
X2 2
3287 RD
2
S33 Horn Switch
1
1850 BK
G200
2
P12 Horn
1
250 BK
G120

5501977

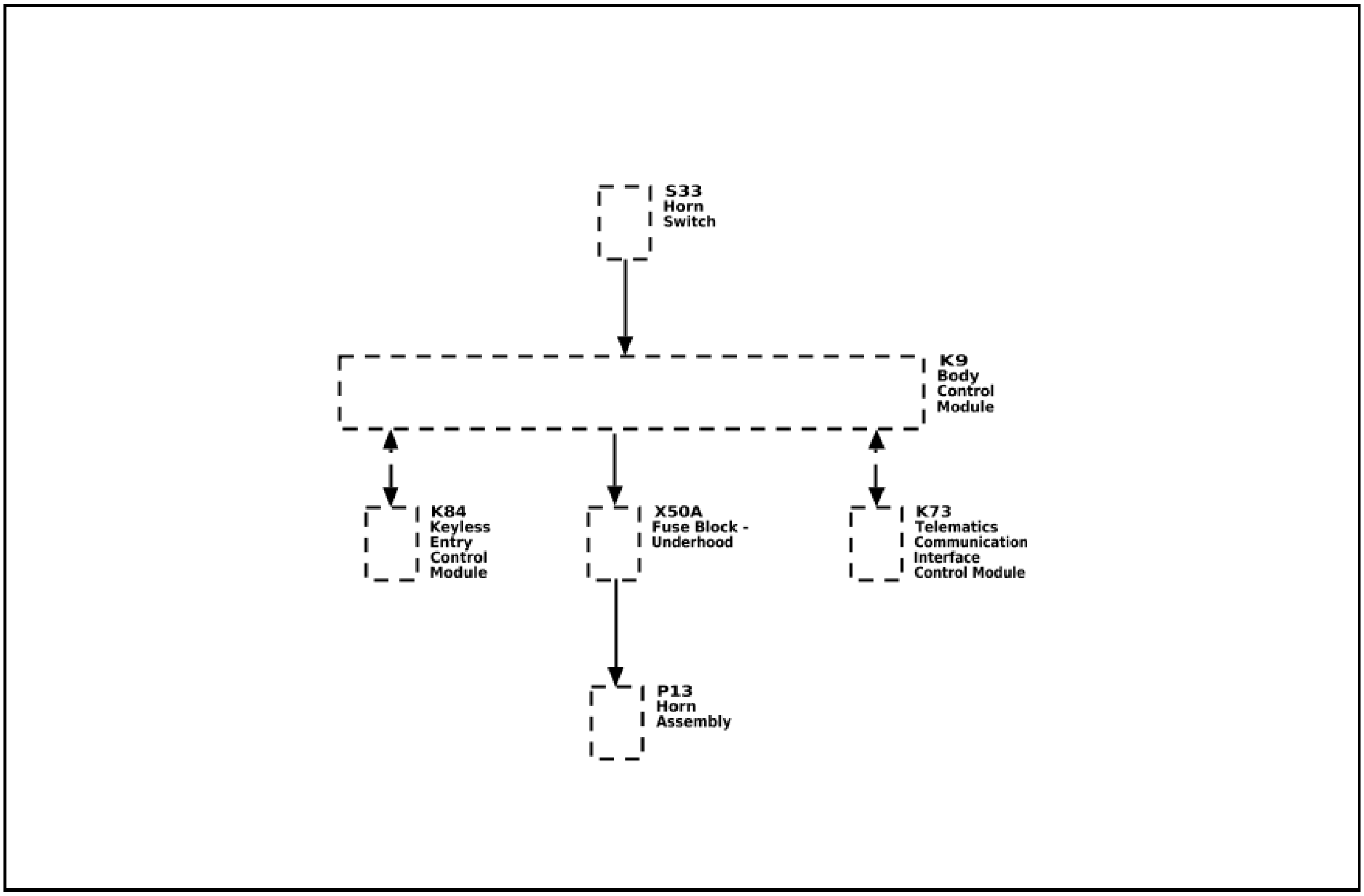
Description and Operation

Horns System Description and Operation

System Description

The horn system consists of the following components:

- HORN fuse
- Underhood fuse block (Contains PCB horn relay)
- Horn switch
- Horn assembly
- Body control module (BCM)



3270443

System Operation

The vehicle horn system is activated under the following conditions:

- When the horn switch is depressed
- The BCM commands the horns ON under any of the following conditions:
  - – When the content theft deterrent system detects a vehicle intrusion—For further information refer to Theft Systems Description and Operation.
  - – When the panic button is depressed on the remote control door lock transmitter—For further information refer to *Keyless Entry System Description and Operation on page 8-12*.
  - – When the keyless entry system is used to lock the vehicle, a horn chirp may sound to notify the driver that the vehicle has been locked. The notification feature may be enabled or disabled through personalization. For further information refer to *Keyless Entry System Description and Operation on page 8-12*.
  - – When the OnStar® system is used to sound the horns if equipped—For further information, refer to OnStar Description and Operation.

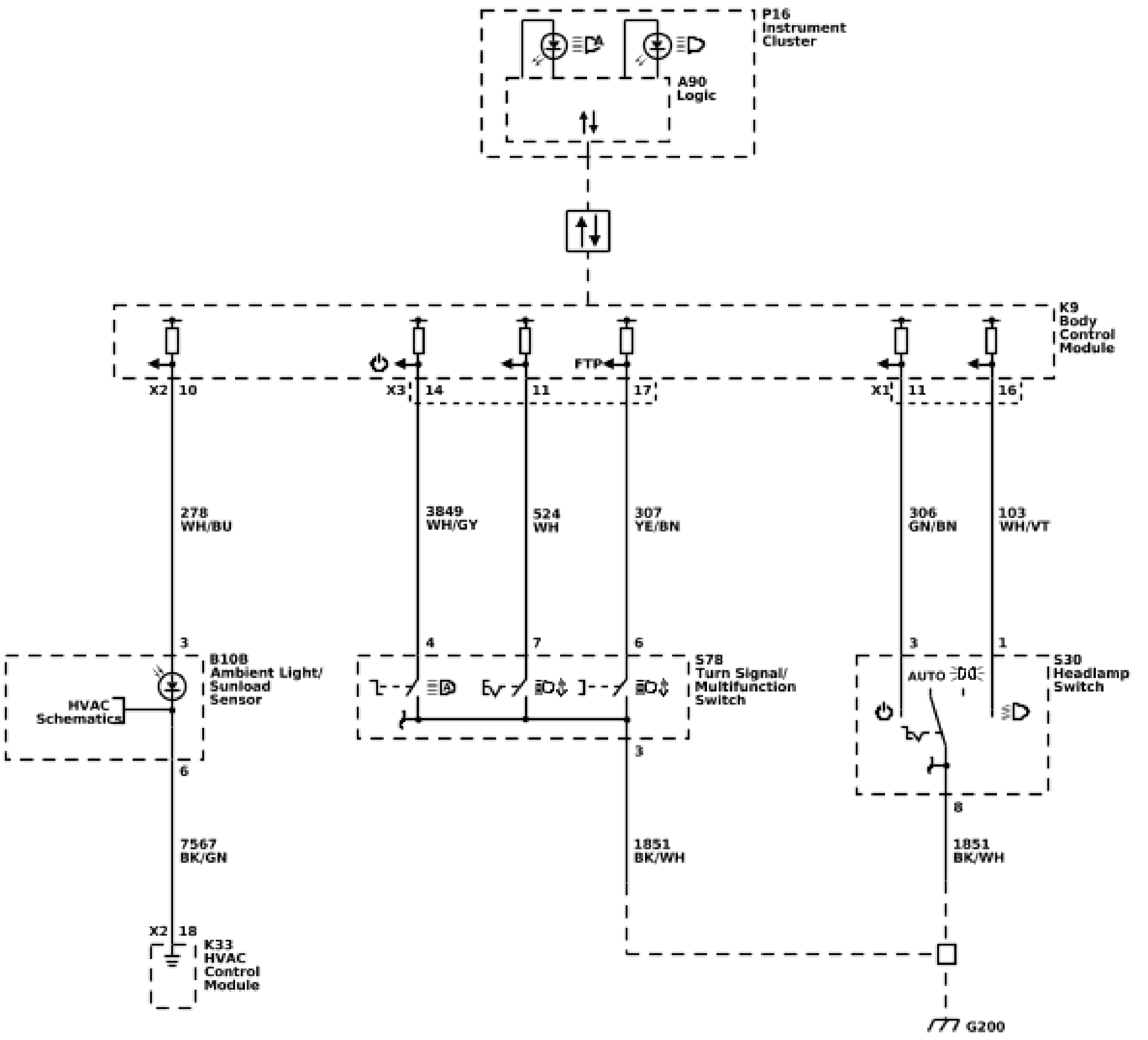
Circuit Operation

Battery positive voltage is applied at all times to the horn relay coil and the horn relay switch. Pressing either of the horn switches applies ground to the horn relay control circuit. The BCM may also apply ground to the horn relay control circuit as described above. When the horn relay control circuit is grounded, the horn relay is energized and battery positive voltage is applied to the horns through the horn control circuit. The horns sound as long as ground is applied to the horn relay control circuit.

Lighting

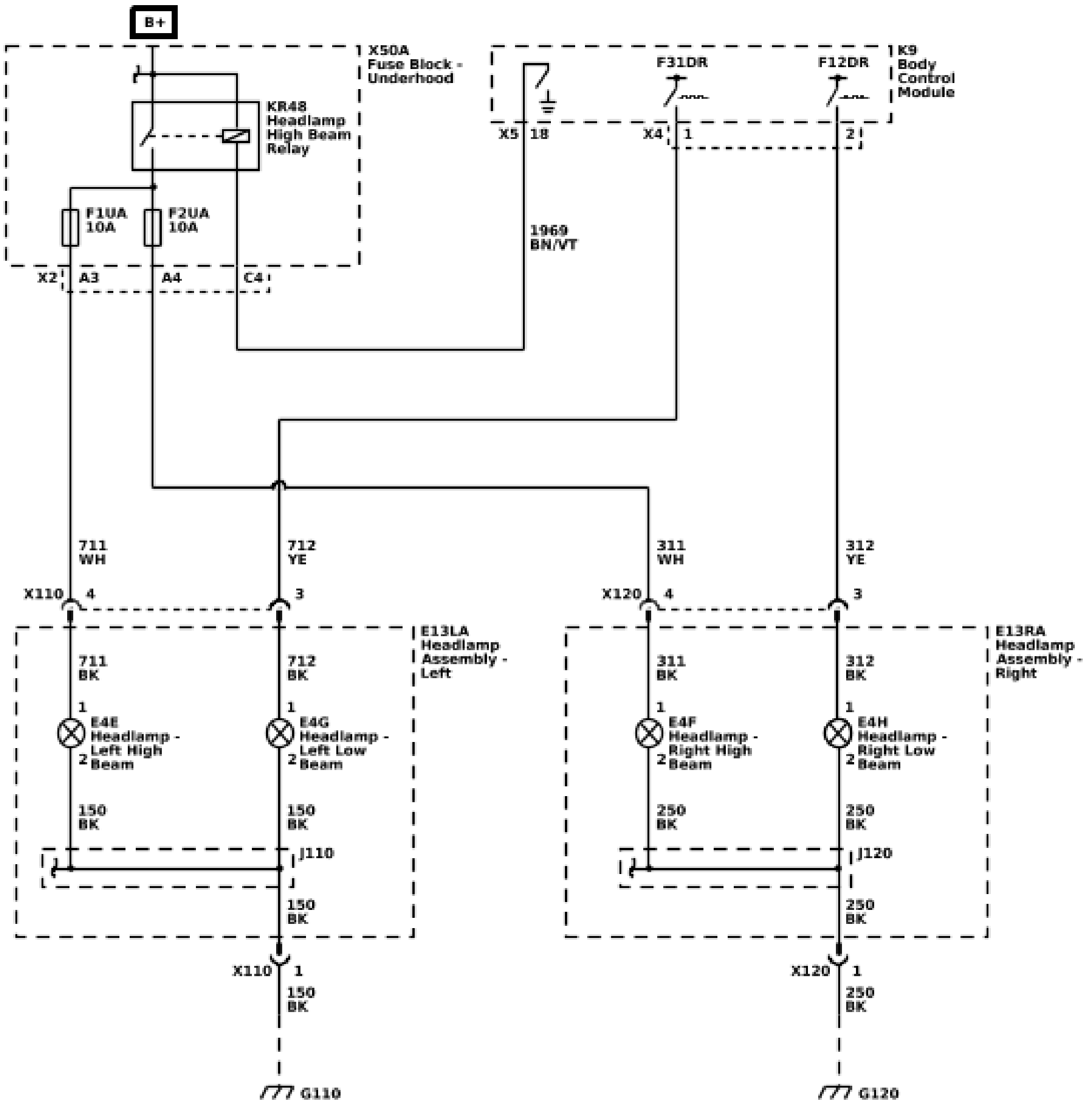
Schematic and Routing Diagrams

Headlights/Daytime Running Lights (DRL) Schematics (Controls and Indicators)


P16
Instrument
Cluster
A90
Logic
K9
Body
Control
Module
FTP
X2 10
X3 14
11
17
X1 11
16
278
WH/BU
3849
WH/GY
524
WH
307
YE/BN
306
GN/BN
103
WH/VT
3
4
7
6
3
1
B108
Ambient Light/
Sunload
Sensor
HVAC
Schematics
S78
Turn Signal/
Multifunction
Switch
S30
Headlamp
Switch
AUTO
6
3
8
7567
BK/GN
1851
BK/WH
1851
BK/WH
X2 18
K33
HVAC
Control
Module
G200

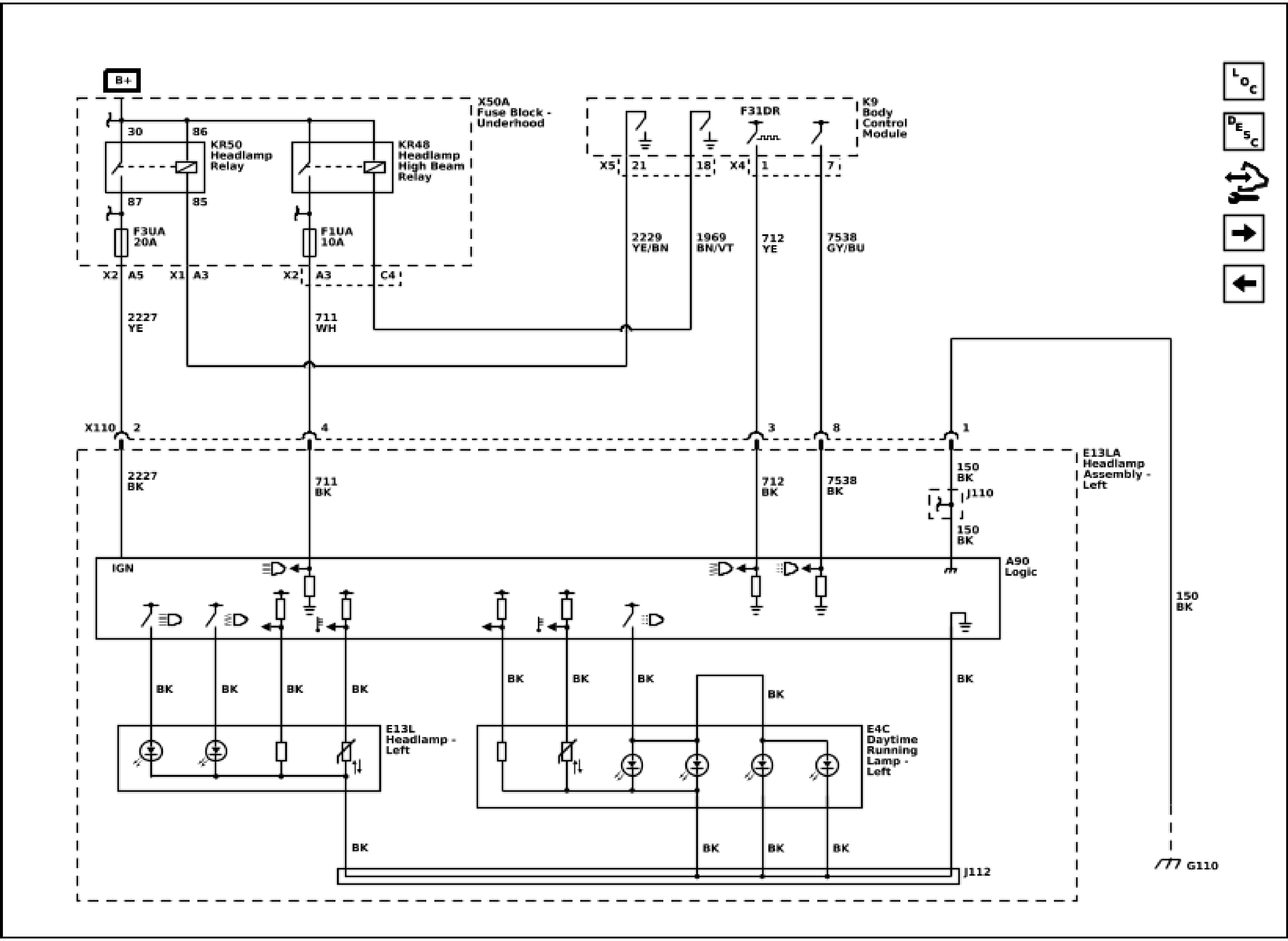
5501983

Headlights/Daytime Running Lights (DRL) Schematics (Headlamps (GF2/GF5/GPZ))


B+
X50A
Fuse Block -
Underhood
1
KR48
Headlamp
High Beam
Relay
F1UA
10A
F2UA
10A
X2
A3
A4
C4
K9
Body
Control
Module
F31DR
F12DR
X5
18
X4
1
2
1969
BN/VT
711
WH
712
YE
311
WH
312
YE
X110
4
3
X120
4
3
E13LA
Headlamp
Assembly -
Left
E13RA
Headlamp
Assembly -
Right
711
BK
712
BK
311
BK
312
BK
1
E4E
Headlamp -
Left High
Beam
2
E4G
Headlamp -
Left Low
Beam
E4F
Headlamp -
Right High
Beam
E4H
Headlamp -
Right Low
Beam
150
BK
250
BK
J110
J120
X110
1
150
BK
X120
1
250
BK
G110
G120

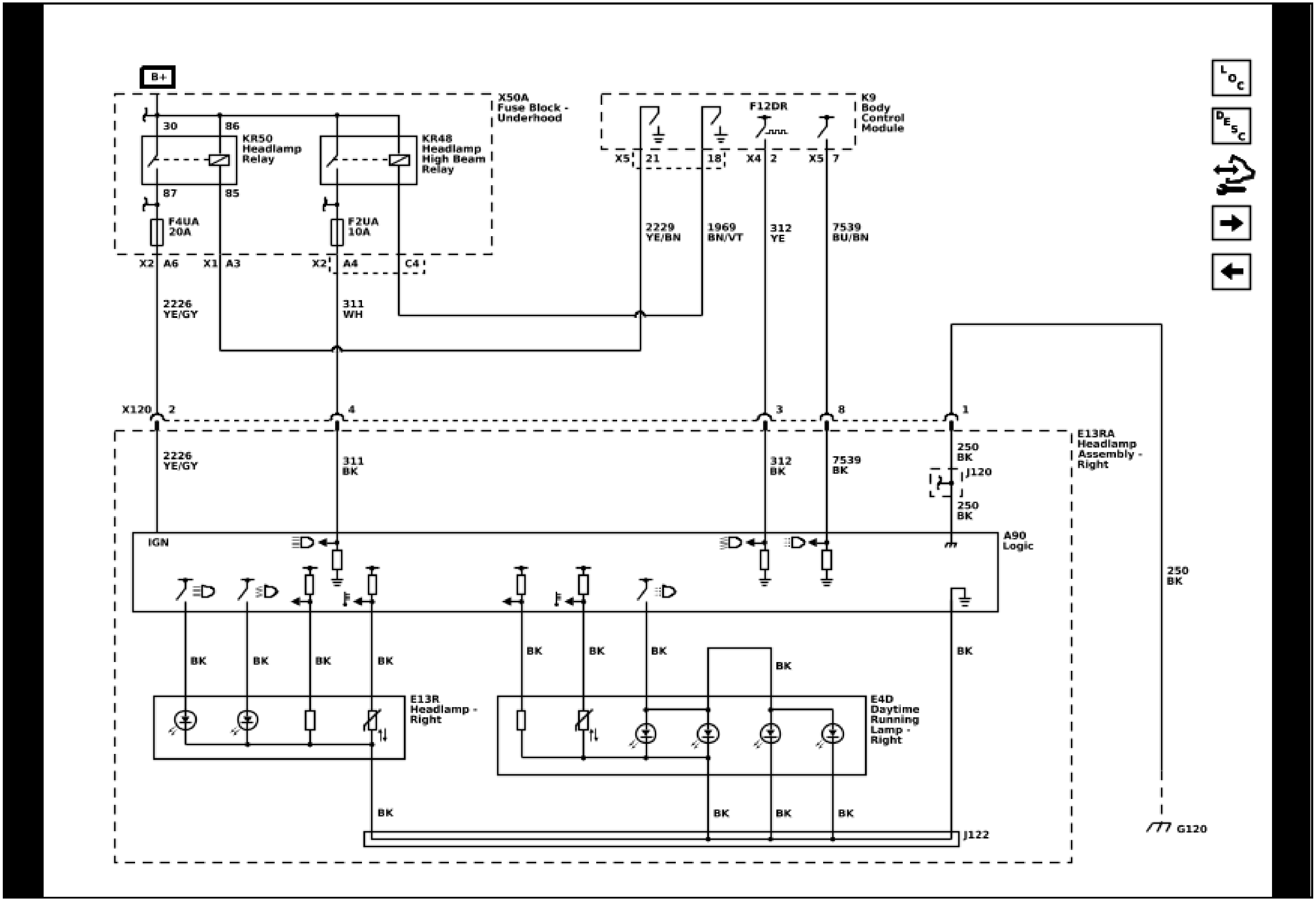
5501984

Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left (GF3/GF4/GF9/GFC))


B+
30
86
KR50 Headlamp Relay
87
85
F3UA 20A
KR48 Headlamp High Beam Relay
F1UA 10A
X50A Fuse Block - Underhood
X2 A5
X1 A3
X2 A3
C4
2227 YE
711 WH
X5 21
18
X4 1
7
F31DR
K9 Body Control Module
2229 YE/BN
1969 BN/VT
712 YE
7538 GY/BU
X110 2
4
3
8
1
2227 BK
711 BK
712 BK
7538 BK
150 BK
J110
150 BK
E13LA Headlamp Assembly - Left
IGN
A90 Logic
150 BK
BK
BK
BK
BK
BK
BK
BK
BK
BK
E13L Headlamp - Left
E4C Daytime Running Lamp - Left
BK
BK
BK
BK
J112
G110

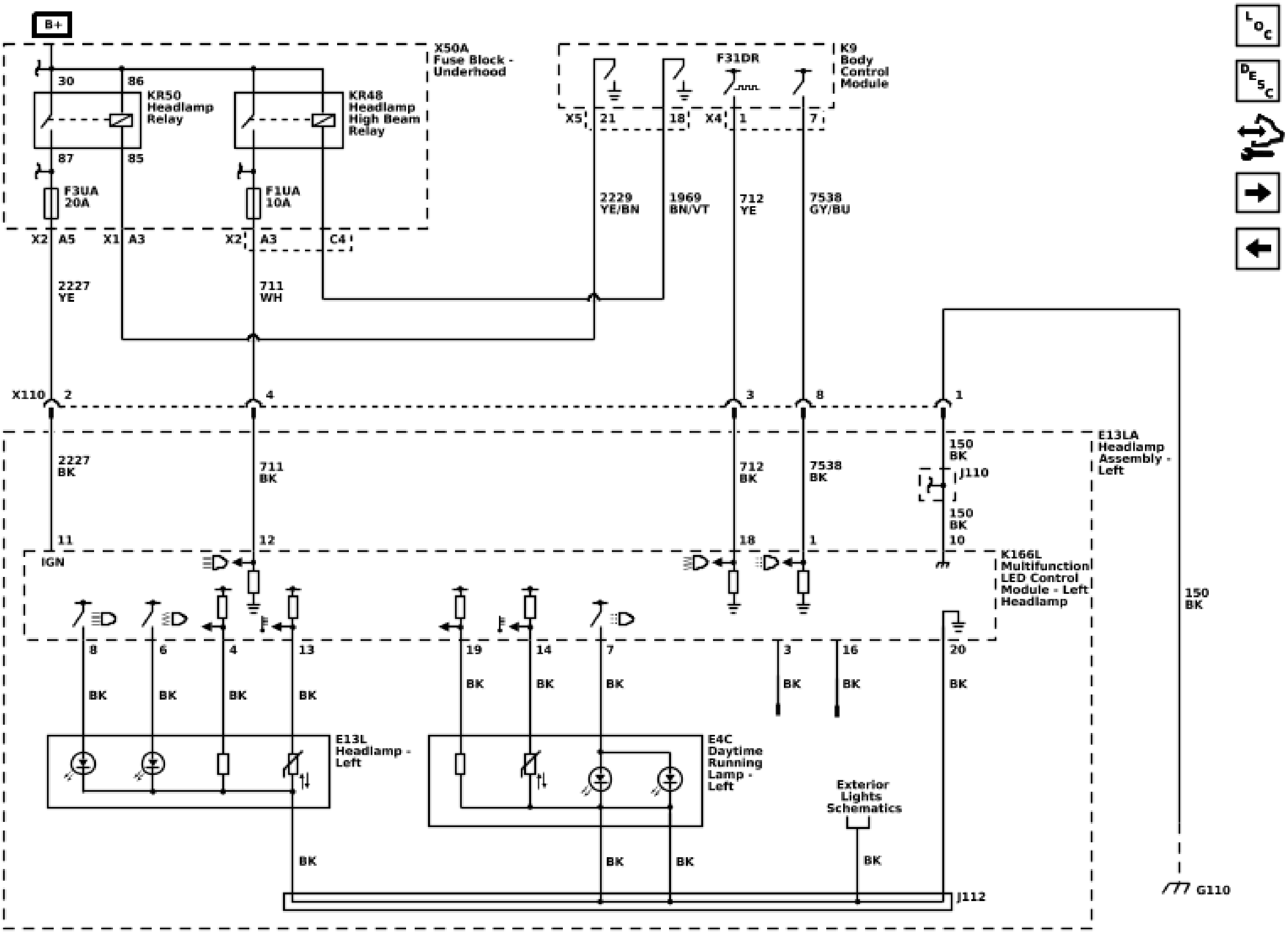
5501985

Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right (GF3/GF4/GF9/GFC))


B+
X50A Fuse Block - Underhood
30
86
KR50 Headlamp Relay
87
85
KR48 Headlamp High Beam Relay
F4UA 20A
F2UA 10A
X2 A6
X1 A3
X2 A4
C4
F12DR
K9 Body Control Module
X5 21
18
X4 2
X5 7
2229 YE/BN
1969 BN/VT
312 YE
7539 BU/BN
2226 YE/GY
311 WH
X120 2
4
3
8
1
250 BK
J120
250 BK
2226 YE/GY
311 BK
312 BK
7539 BK
E13RA Headlamp Assembly - Right
A90 Logic
IGN
BK
E13R Headlamp - Right
E4D Daytime Running Lamp - Right
J122
250 BK
G120

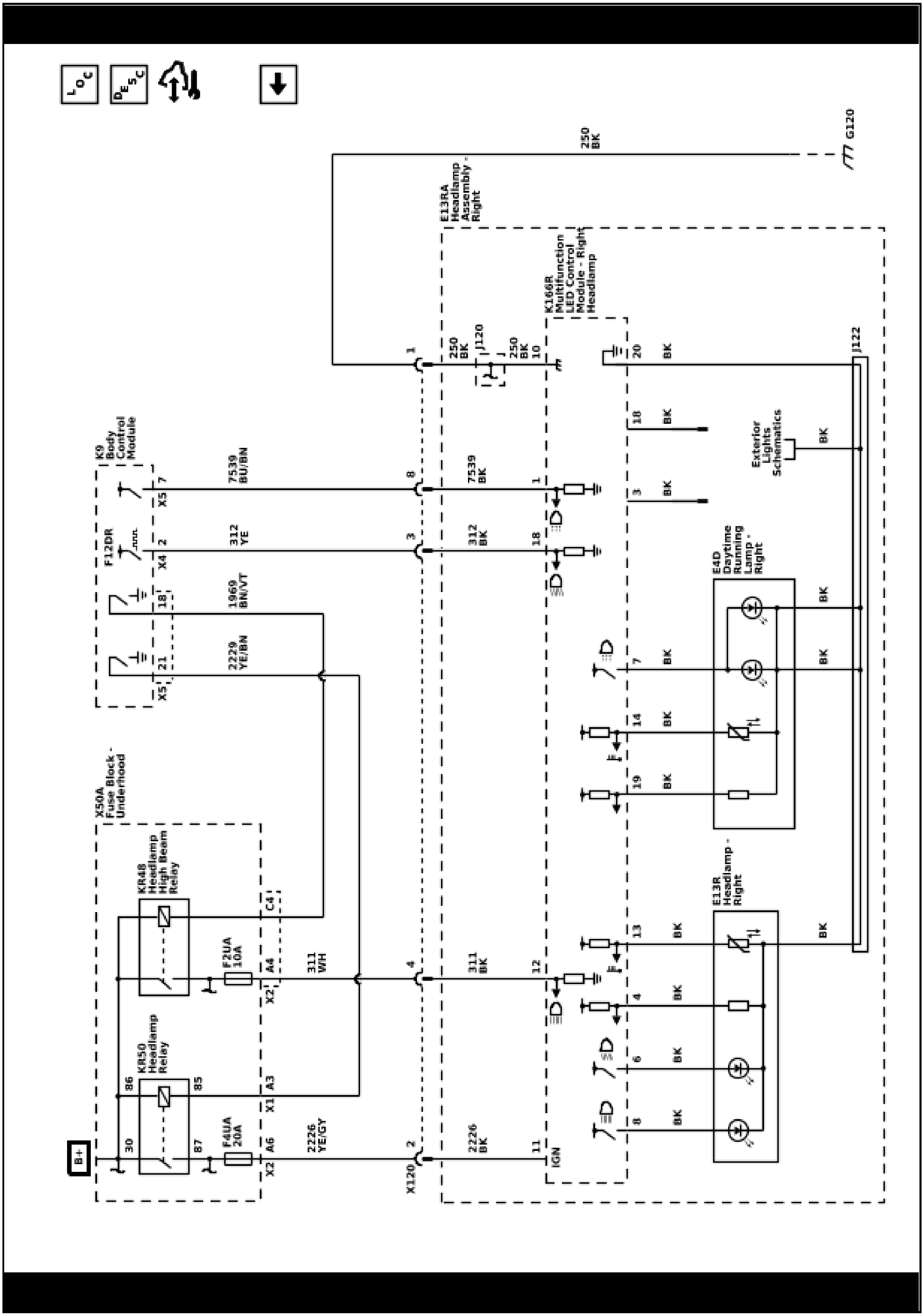
5501986

Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left (GFD))

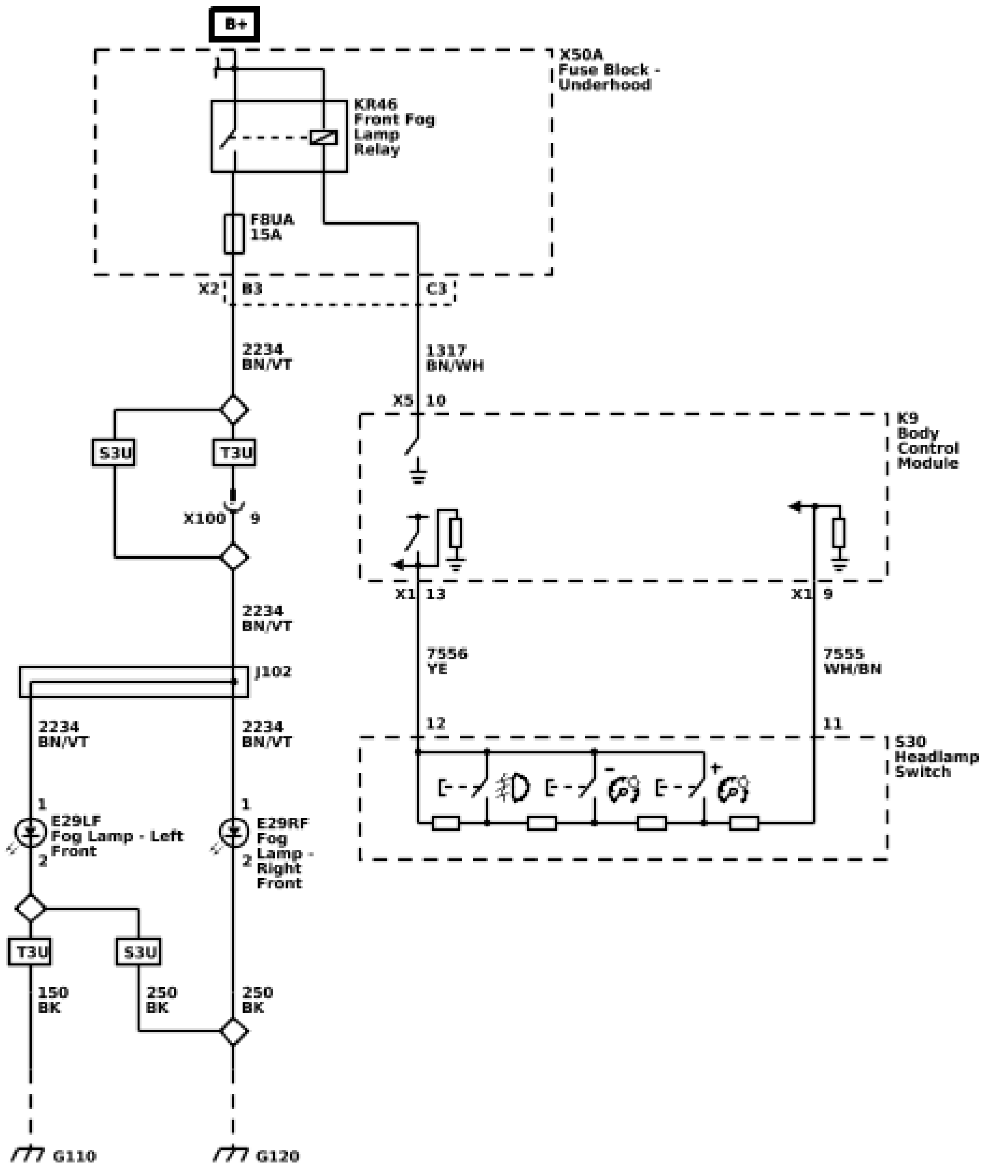

B+
X50A Fuse Block - Underhood
30
86
KR50 Headlamp Relay
87
85
F3UA 20A
KR48 Headlamp High Beam Relay
F1UA 10A
X2 A5
X1 A3
X2 A3
C4
2227 YE
711 WH
K9 Body Control Module
F31DR
X5 21
18
X4 1
7
2229 YE/BN
1969 BN/VT
712 YE
7538 GY/BU
X110 2
4
3
8
1
E13LA Headlamp Assembly - Left
2227 BK
711 BK
712 BK
7538 BK
150 BK
J110
150 BK
11
12
18
1
10
IGN
K166L Multifunction LED Control Module - Left Headlamp
8
6
4
13
19
14
7
3
16
20
BK
E13L Headlamp - Left
E4C Daytime Running Lamp - Left
Exterior Lights Schematics
J112
150 BK
G110

5501987

Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right (GFD))

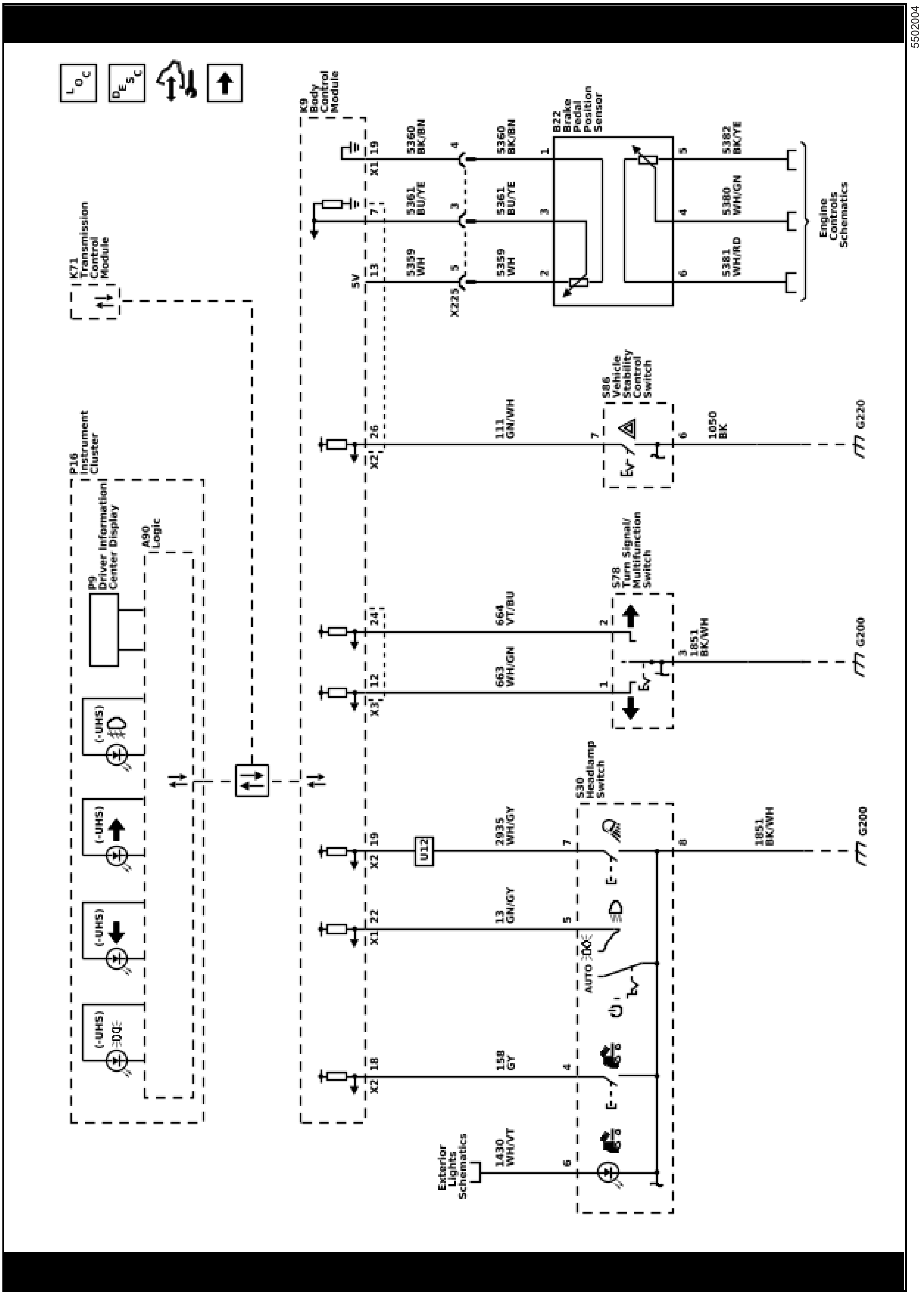

5501988
LOC
DESC
B+
X50A Fuse Block - Underhood
KR50 Headlamp Relay
30
87
86
85
KR48 Headlamp High Beam Relay
F4UA 20A
F2UA 10A
X2 A6
X1 A3
X2 A4
C4
K9 Body Control Module
X5 21
18
X4 2
F12DR
X5 7
2226 YE/GY
2229 YE/BN
311 WH
1969 BN/VT
312 YE
7539 BU/BN
250 BK
G120
X120
2
4
3
8
1
2226 BK
311 BK
312 BK
7539 BK
250 BK
J120
250 BK
E13RA Headlamp Assembly - Right
K166R Multifunction LED Control Module - Right Headlamp
11 IGN
12
18
1
10
20
18
3
13
4
6
8
14
19
7
BK
E13R Headlamp - Right
E4D Daytime Running Lamp - Right
Exterior Lights Schematics
J122

Fog Lights Schematics (Fog Lamps (T3U) and Fog Lamp Accessory Kit (S3U))

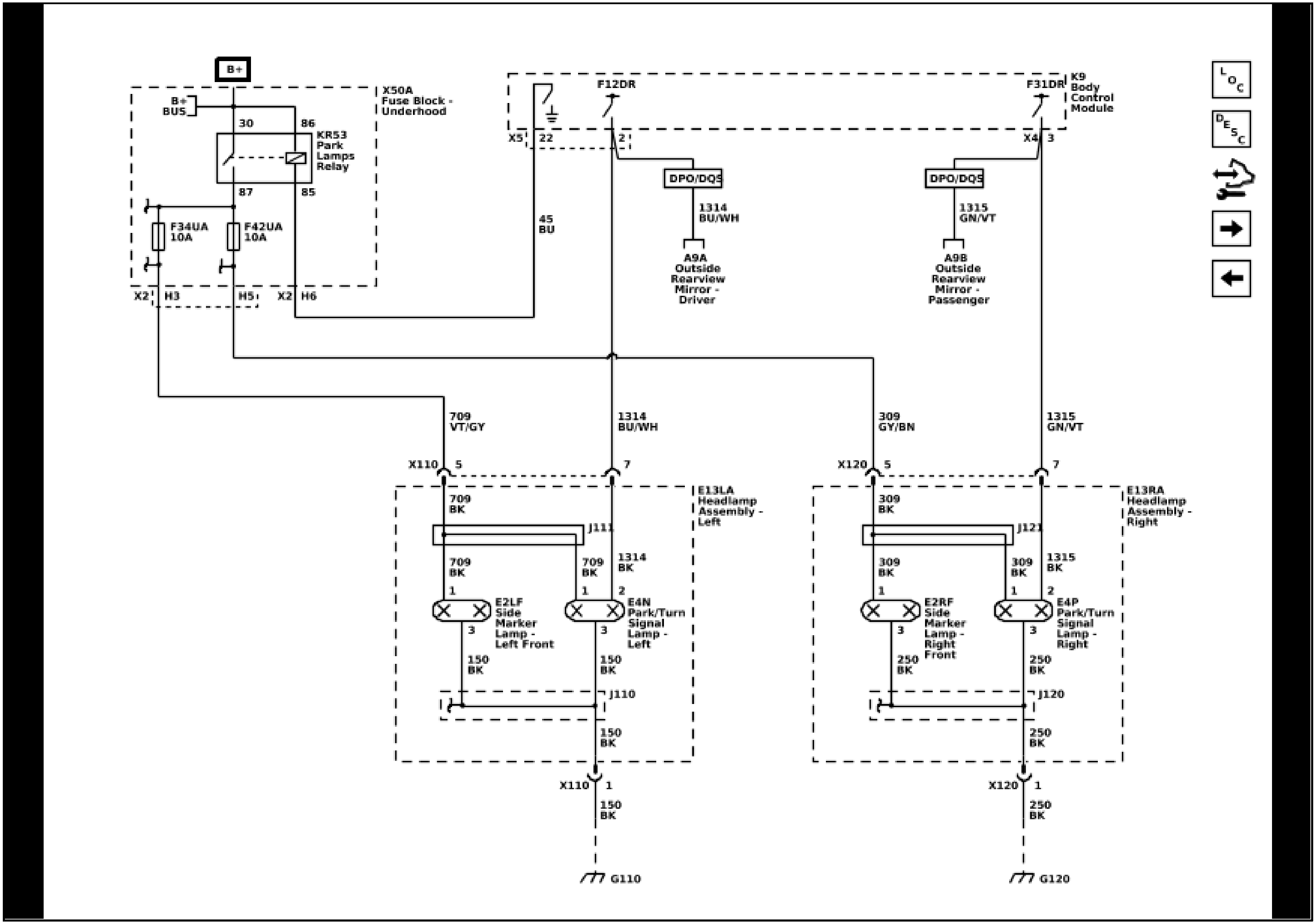

B+
X50A
Fuse Block - Underhood
KR46
Front Fog Lamp Relay
F8UA
15A
X2
B3
C3
2234
BN/VT
1317
BN/WH
X5
10
K9
Body Control Module
S3U
T3U
X100
9
X1
13
X1
9
2234
BN/VT
7556
YE
7555
WH/BN
J102
2234
BN/VT
2234
BN/VT
12
11
S30
Headlamp Switch
1
E29LF
Fog Lamp - Left Front
2
1
E29RF
Fog Lamp - Right Front
2
T3U
S3U
150
BK
250
BK
250
BK
G110
G120

5501989

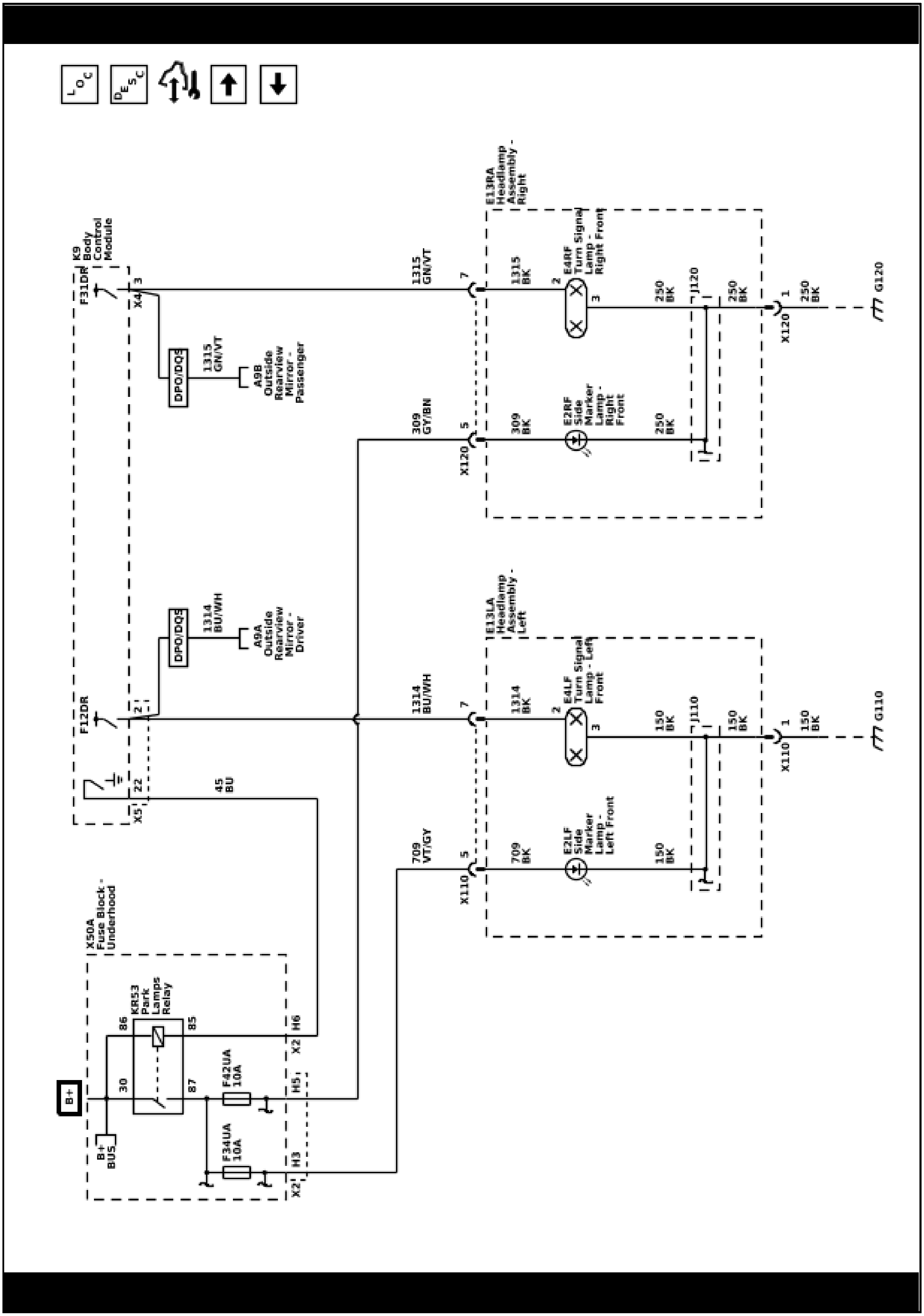
Exterior Lights Schematics (Controls and Indicators)


5502004
K71 Transmission Control Module
P16 Instrument Cluster
P9 Driver Information Center Display
A90 Logic
(-UHS)
(-UHS)
(-UHS)
(-UHS)
K9 Body Control Module
5V
X1 19
7
13
X2 26
24
X3 12
X2 19
X1 22
X2 18
5360 BK/BN
5361 BU/YE
5359 WH
X225
4
3
5
B22 Brake Pedal Position Sensor
1
3
2
5
4
6
5382 BK/YE
5380 WH/GN
5381 WH/RD
Engine Controls Schematics
111 GN/WH
S86 Vehicle Stability Control Switch
7
6
1050 BK
G220
664 VT/BU
663 WH/GN
S78 Turn Signal/ Multifunction Switch
2
1
3
1851 BK/WH
G200
U12
2935 WH/GY
13 GN/GY
158 GY
S30 Headlamp Switch
7
5
4
6
8
AUTO
1851 BK/WH
G200
1430 WH/VT
Exterior Lights Schematics

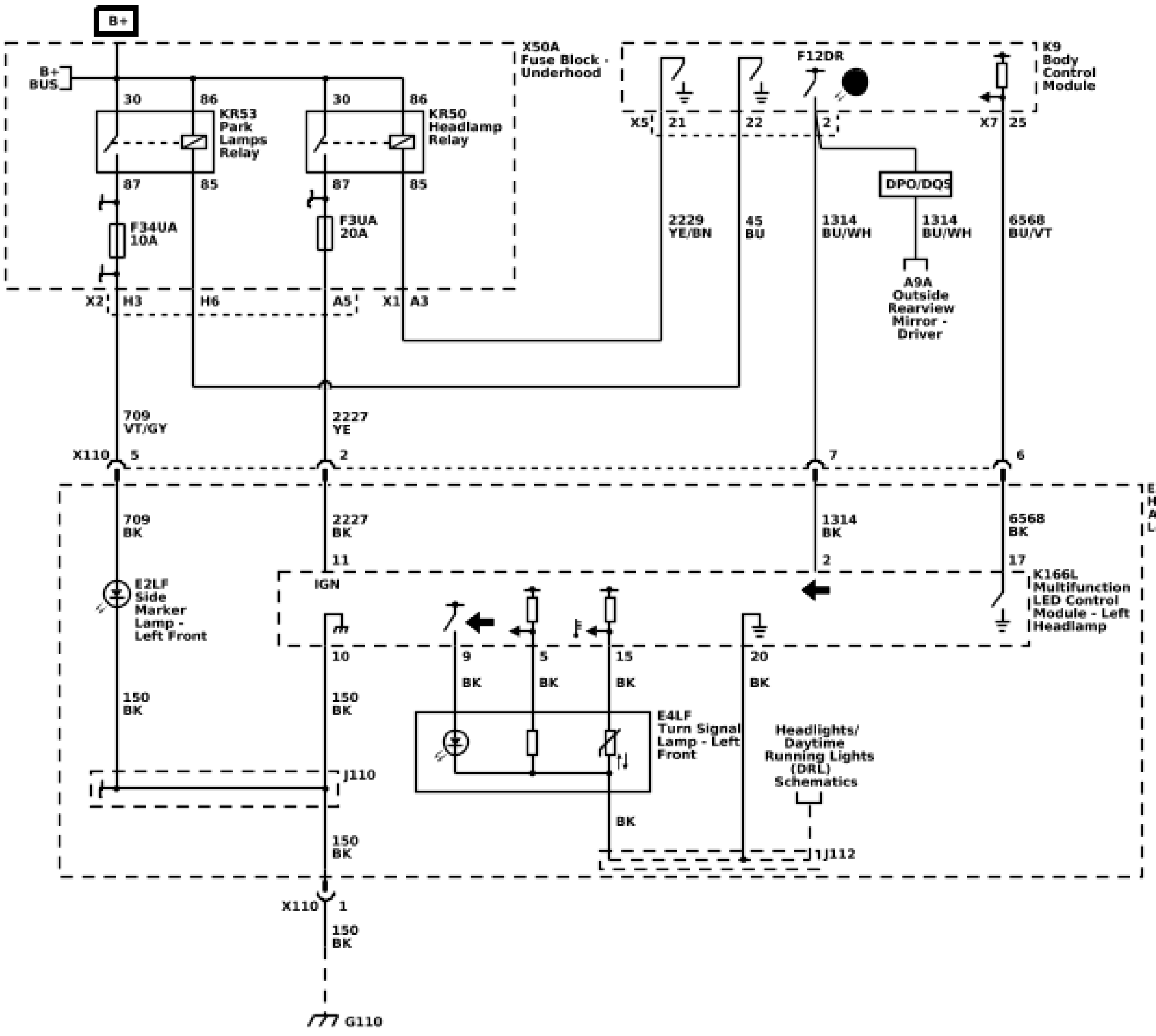
Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps (GF2/GF5/GPZ))


B+
B+ BUS
X50A Fuse Block - Underhood
30
86
KR53 Park Lamps Relay
87
85
F34UA 10A
F42UA 10A
X2 H3
H5
X2 H6
45 BU
X5 22
F12DR
2
DPO/DQS
1314 BU/WH
A9A Outside Rearview Mirror - Driver
F31DR
K9 Body Control Module
X4 3
DPO/DQS
1315 GN/VT
A9B Outside Rearview Mirror - Passenger
709 VT/GY
1314 BU/WH
309 GY/BN
1315 GN/VT
X110 5
7
X120 5
7
E13LA Headlamp Assembly - Left
709 BK
J111
709 BK
709 BK
1314 BK
1
1
2
E2LF Side Marker Lamp - Left Front
E4N Park/Turn Signal Lamp - Left
3
3
150 BK
150 BK
J110
150 BK
X110 1
150 BK
G110
E13RA Headlamp Assembly - Right
309 BK
J121
309 BK
309 BK
1315 BK
1
1
2
E2RF Side Marker Lamp - Right Front
E4P Park/Turn Signal Lamp - Right
3
3
250 BK
250 BK
J120
250 BK
X120 1
250 BK
G120
5502005

Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps (GF3/GF4/GF9/GFC))

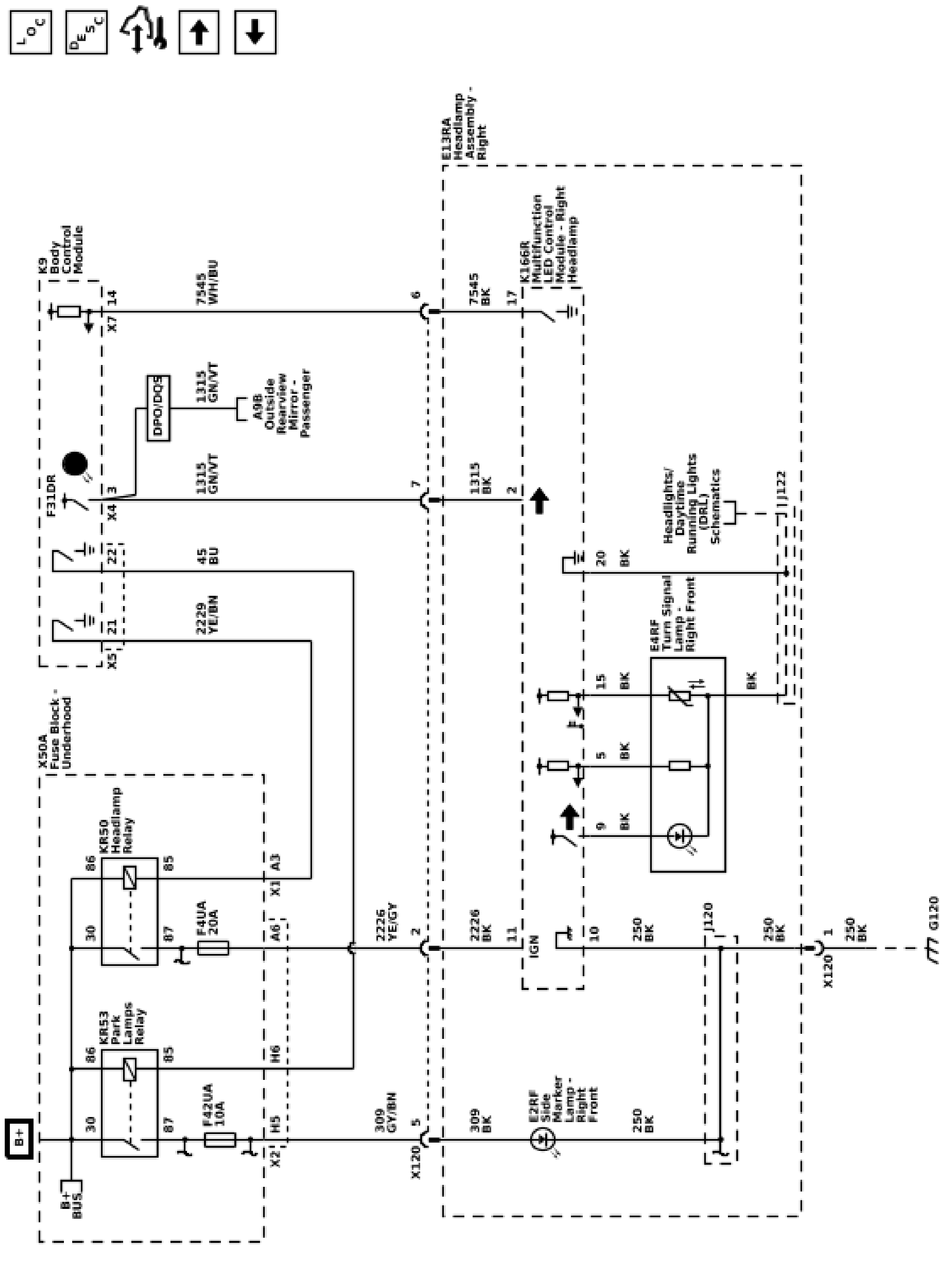

5502006
B+
B+ BUS
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
86
85
30
87
F42UA 10A
F34UA 10A
H6
X2
H5
H3
X2
45 BU
X5
22
F12DR
2
K9 Body Control Module
F31DR
X4
3
DPO/DQS
1314 BU/WH
A9A Outside Rearview Mirror - Driver
1315 GN/VT
A9B Outside Rearview Mirror - Passenger
709 VT/GY
5
X110
1314 BU/WH
7
309 GY/BN
5
X120
1315 GN/VT
7
E13LA Headlamp Assembly - Left
709 BK
E2LF Side Marker Lamp - Left Front
1314 BK
2
E4LF Turn Signal Lamp - Left Front
3
150 BK
J110
150 BK
1
X110
150 BK
G110
E13RA Headlamp Assembly - Right
309 BK
E2RF Side Marker Lamp - Right Front
1315 BK
2
E4RF Turn Signal Lamp - Right Front
3
250 BK
J120
250 BK
1
X120
250 BK
G120

Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps - Left (GFD))


B+
B+ BUS
X50A Fuse Block - Underhood
30
86
KR53 Park Lamps Relay
87
85
F34UA 10A
30
86
KR50 Headlamp Relay
87
85
F3UA 20A
X2 H3
H6
A5
X1 A3
K9 Body Control Module
F12DR
X5 21
22
2
X7 25
2229 YE/BN
45 BU
1314 BU/WH
DPO/DQS
1314 BU/WH
A9A Outside Rearview Mirror - Driver
6568 BU/VT
709 VT/GY
2227 YE
X110 5
2
7
6
E13LA Headlamp Assembly - Left
709 BK
2227 BK
1314 BK
6568 BK
11
2
17
IGN
K166L Multifunction LED Control Module - Left Headlamp
E2LF Side Marker Lamp - Left Front
10
9
5
15
20
BK
BK
BK
BK
150 BK
150 BK
E4LF Turn Signal Lamp - Left Front
Headlights/ Daytime Running Lights (DRL) Schematics
J110
BK
150 BK
1J112
X110 1
150 BK
G110

5502007

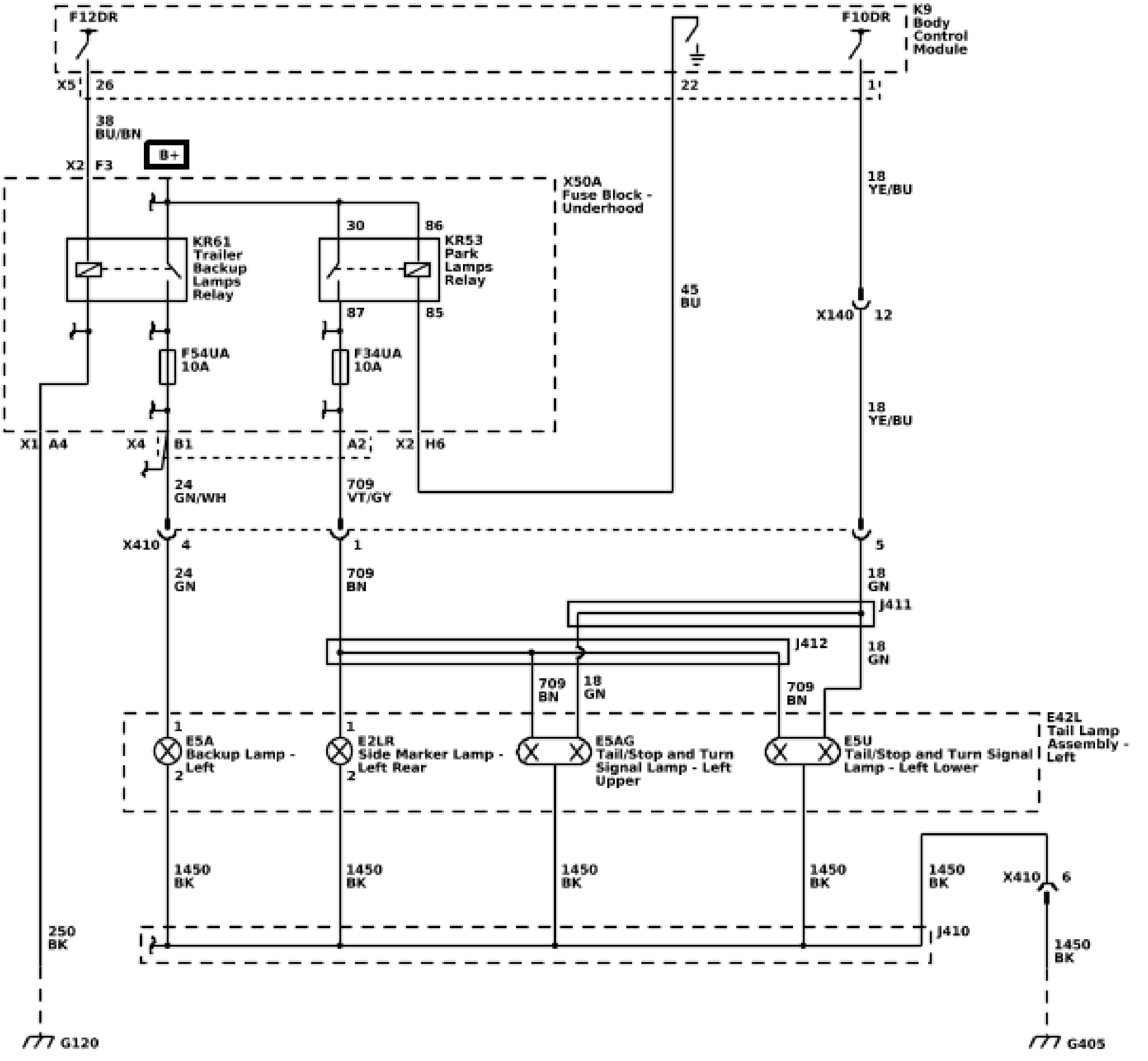
Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps - Right (GFD))



B+
B+ BUS
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
KR50 Headlamp Relay
86
30
85
87
F42UA 10A
F4UA 20A
X2 H5
H6
X1 A6
A3
K9 Body Control Module
X5 21
22
X4 3
X7 14
F31DR
DPO/DQS
1315 GN/VT
A9B Outside Rearview Mirror - Passenger
309 GY/BN
2226 YE/GY
2229 YE/BN
45 BU
1315 GN/VT
7545 WH/BU
X120 5
2
7
6
E13RA Headlamp Assembly - Right
309 BK
2226 BK
11
IGN
10
250 BK
1315 BK
2
7545 BK
17
K166R Multifunction LED Control Module - Right Headlamp
E2RF Side Marker Lamp - Right Front
9 BK
5 BK
15 BK
20 BK
E4RF Turn Signal Lamp - Right Front
BK
Headlights/ Daytime Running Lights (DRL) Schematics
J122
J120
250 BK
X120 1
250 BK
G120

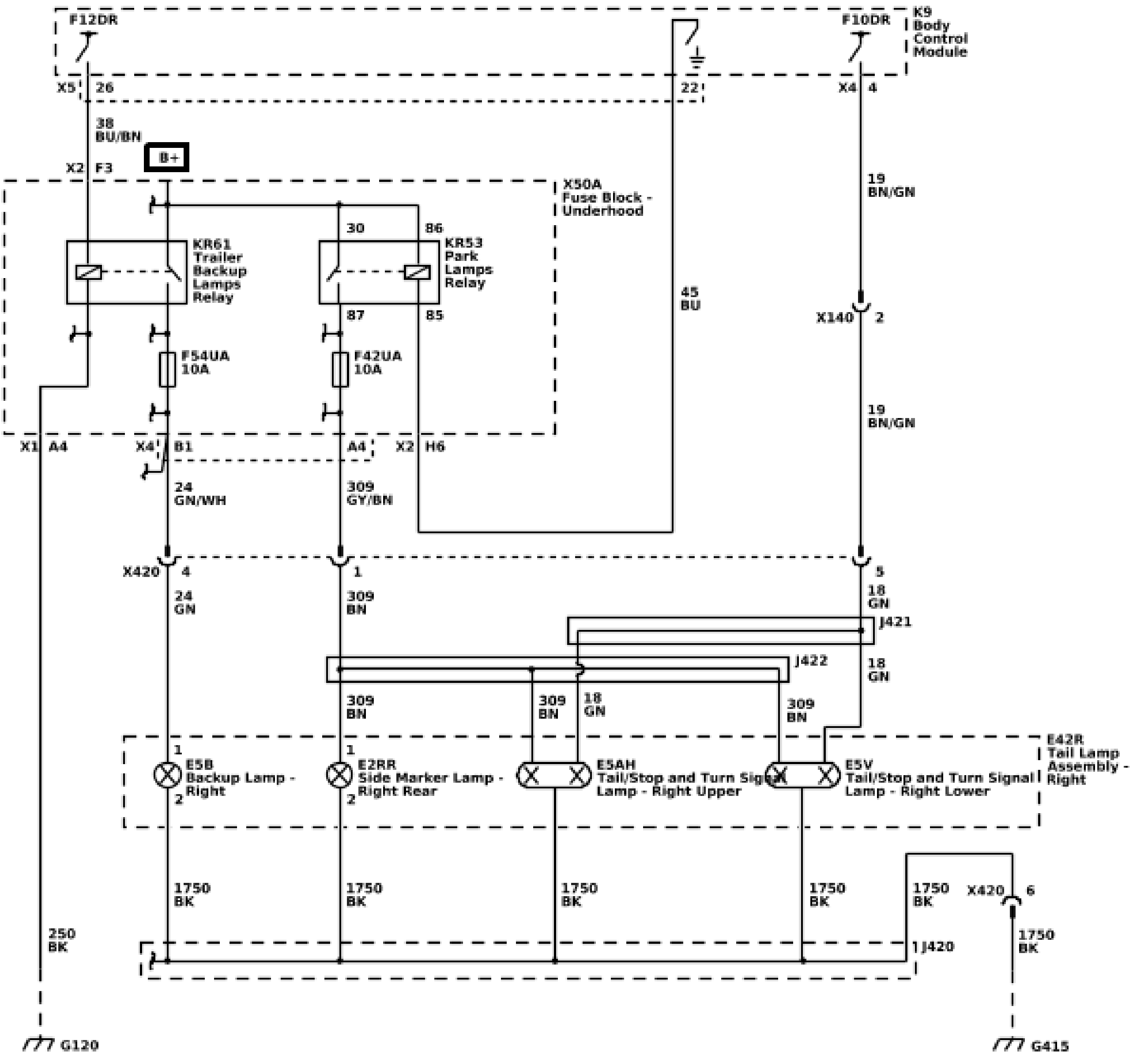
5502008

Exterior Lights Schematics (Tail Lamp Assembly - Left (GF3/GF5))


F12DR
F10DR
K9
Body
Control
Module
X5 26
22
1
38
BU/BN
X2 F3
B+
X50A
Fuse Block -
Underhood
18
YE/BU
30
86
KR61
Trailer
Backup
Lamps
Relay
KR53
Park
Lamps
Relay
87
85
45
BU
X140 12
F54UA
10A
F34UA
10A
18
YE/BU
X1 A4
X4 B1
A2
X2 H6
24
GN/WH
709
VT/GY
X410 4
1
5
24
GN
709
BN
18
GN
J411
J412
18
GN
709
BN
18
GN
709
BN
E42L
Tail Lamp
Assembly -
Left
1
E5A
Backup Lamp -
Left
2
1
E2LR
Side Marker Lamp -
Left Rear
2
E5AG
Tail/Stop and Turn
Signal Lamp - Left
Upper
E5U
Tail/Stop and Turn Signal
Lamp - Left Lower
1450
BK
1450
BK
1450
BK
1450
BK
1450
BK
X410 6
250
BK
J410
1450
BK
G120
G405

5502009

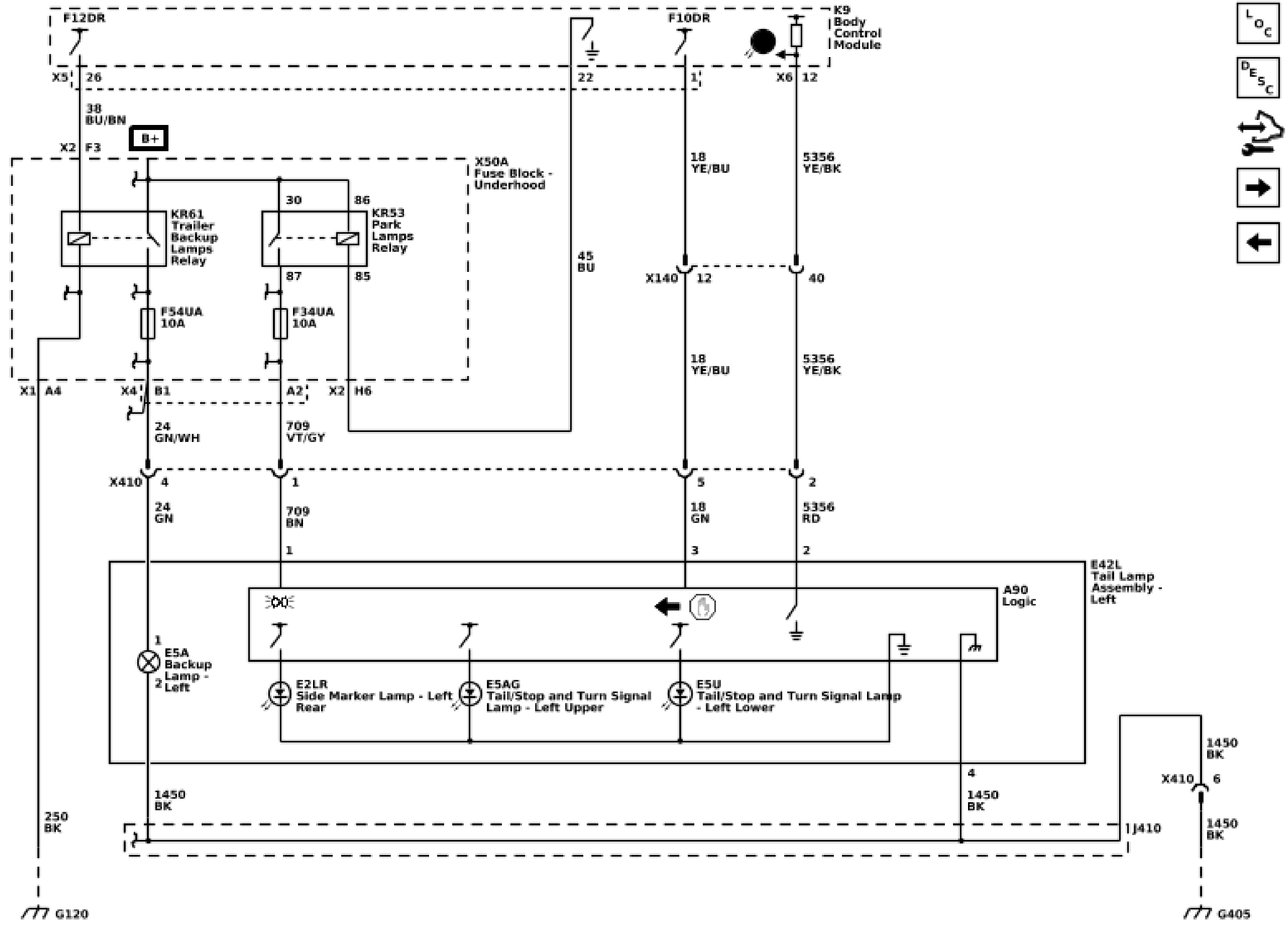
Exterior Lights Schematics (Tail Lamp Assembly - Right (GF3/GF5))



F12DR
F10DR
K9 Body Control Module
X5 26
22
X4 4
38 BU/BN
X2 F3
B+
X50A Fuse Block - Underhood
30
86
KR61 Trailer Backup Lamps Relay
KR53 Park Lamps Relay
87
85
F54UA 10A
F42UA 10A
45 BU
19 BN/GN
X140 2
19 BN/GN
X1 A4
X4 B1
A4
X2 H6
24 GN/WH
309 GY/BN
X420 4
1
5
24 GN
309 BN
18 GN
J421
J422
18 GN
309 BN
309 BN
18 GN
309 BN
E42R Tail Lamp Assembly - Right
1
E5B Backup Lamp - Right
2
1
E2RR Side Marker Lamp - Right Rear
2
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E5V Tail/Stop and Turn Signal Lamp - Right Lower
1750 BK
1750 BK
1750 BK
1750 BK
1750 BK
X420 6
1750 BK
250 BK
J420
G120
G415

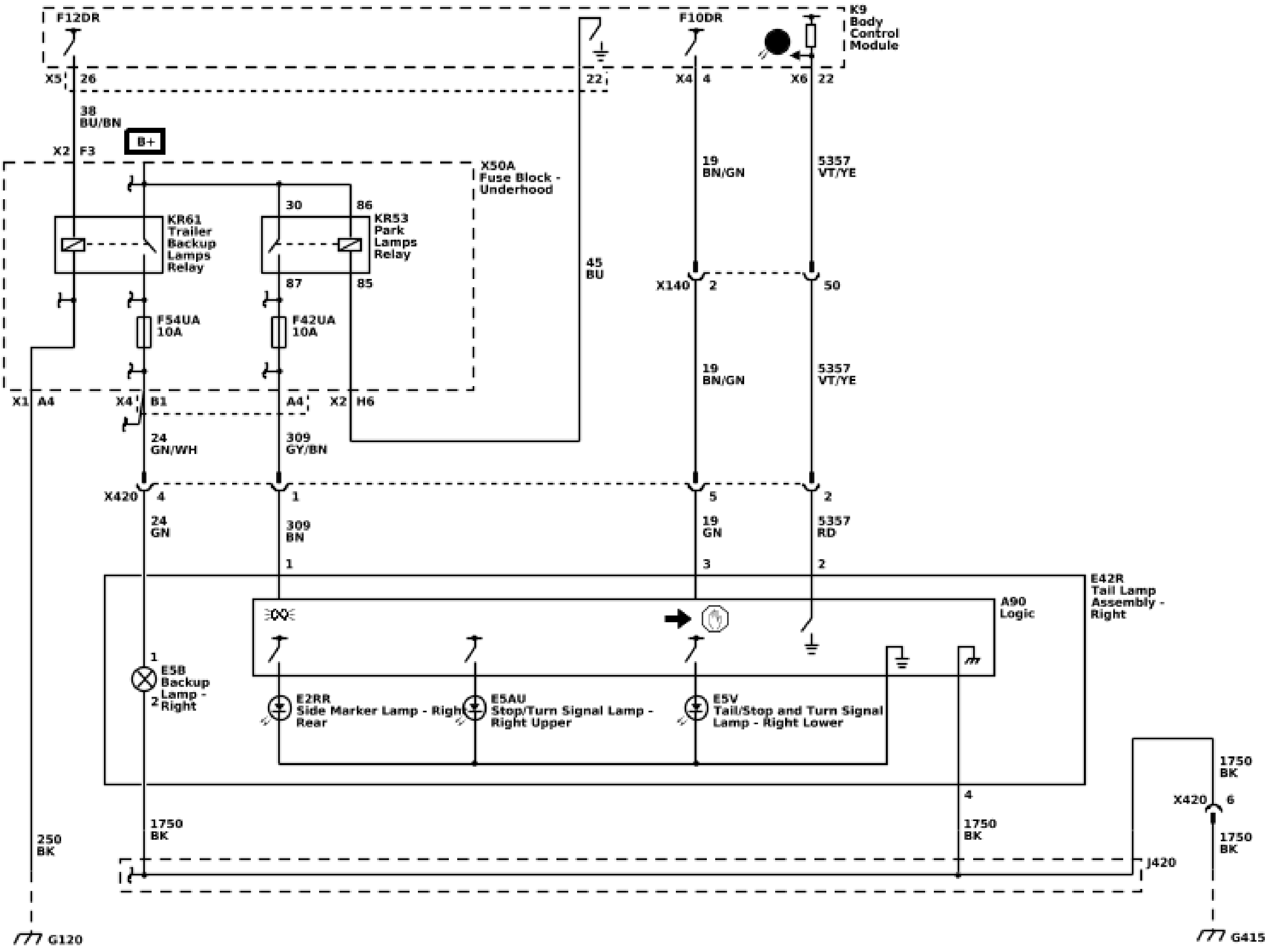
5502010

Exterior Lights Schematics (Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ))


F12DR
F10DR
K9 Body Control Module
X5 26
22
1
X6 12
38 BU/BN
B+
X2 F3
X50A Fuse Block - Underhood
KR61 Trailer Backup Lamps Relay
30
86
KR53 Park Lamps Relay
87
85
F54UA 10A
F34UA 10A
45 BU
18 YE/BU
5356 YE/BK
X140 12
40
X1 A4
X4 B1
A2
X2 H6
24 GN/WH
709 VT/GY
X410 4
1
5
2
24 GN
709 BN
18 GN
5356 RD
1
3
2
E42L Tail Lamp Assembly - Left
A90 Logic
1
E5A Backup Lamp - Left
2
E2LR Side Marker Lamp - Left Rear
E5AG Tail/Stop and Turn Signal Lamp - Left Upper
E5U Tail/Stop and Turn Signal Lamp - Left Lower
4
1450 BK
1450 BK
250 BK
J410
X410 6
1450 BK
1450 BK
G120
G405
LOC
DESC

5502011

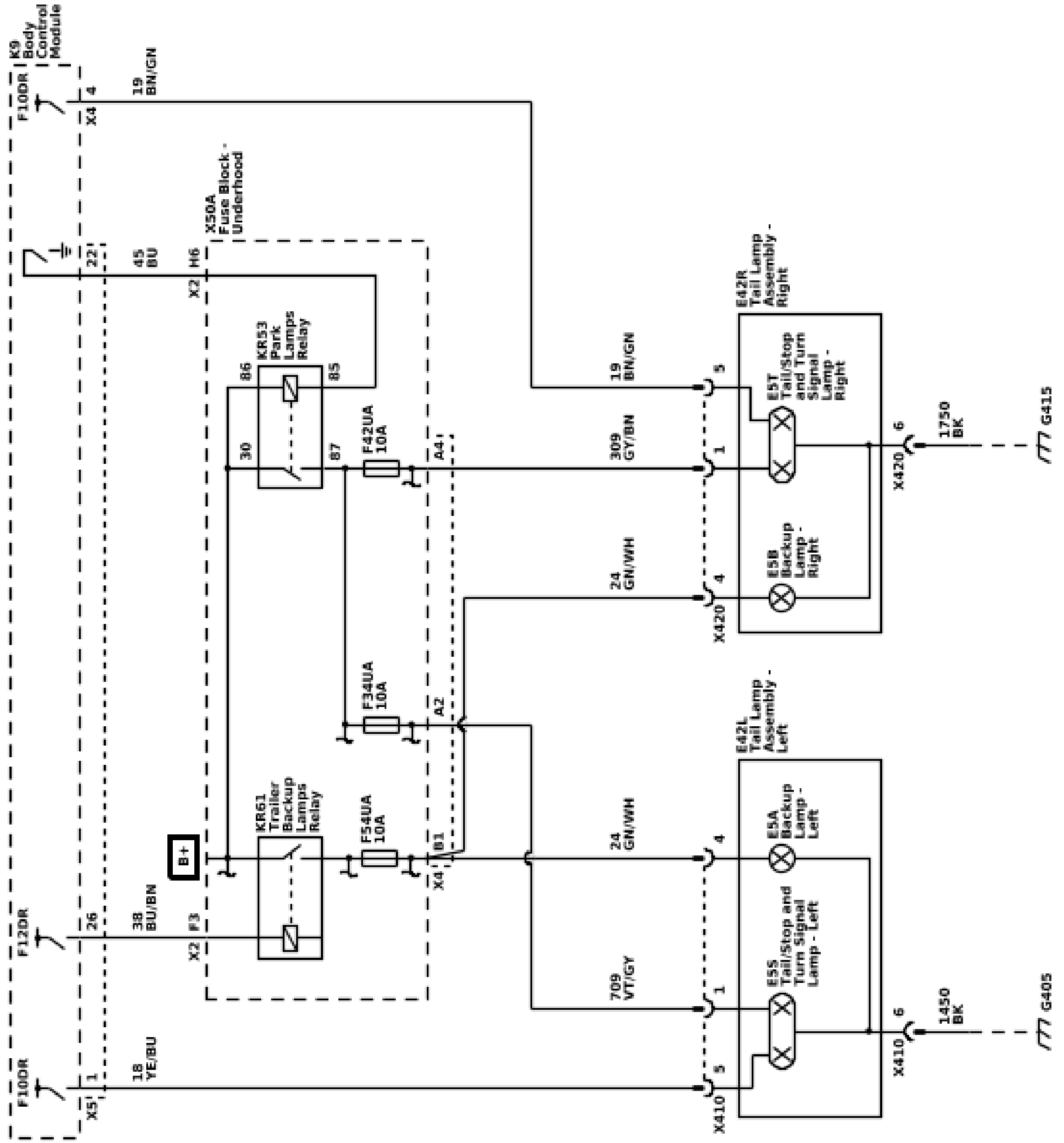
Exterior Lights Schematics (Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ))


K9
Body
Control
Module
F12DR
F10DR
X5 26
22
X4 4
X6 22
38
BU/BN
B+
X2 F3
X50A
Fuse Block -
Underhood
19
BN/GN
5357
VT/YE
30
86
KR61
Trailer
Backup
Lamps
Relay
KR53
Park
Lamps
Relay
87
85
45
BU
X140 2
50
F54UA
10A
F42UA
10A
19
BN/GN
5357
VT/YE
X1 A4
X4 B1
A4
X2 H6
24
GN/WH
309
GY/BN
X420 4
1
5
2
24
GN
309
BN
19
GN
5357
RD
1
3
2
E42R
Tail Lamp
Assembly -
Right
A90
Logic
1
E58
Backup
Lamp -
2 Right
E2RR
Side Marker Lamp - Right
Rear
E5AU
Stop/Turn Signal Lamp -
Right Upper
E5V
Tail/Stop and Turn Signal
Lamp - Right Lower
1750
BK
4
1750
BK
X420 6
1750
BK
250
BK
1750
BK
J420
G120
G415

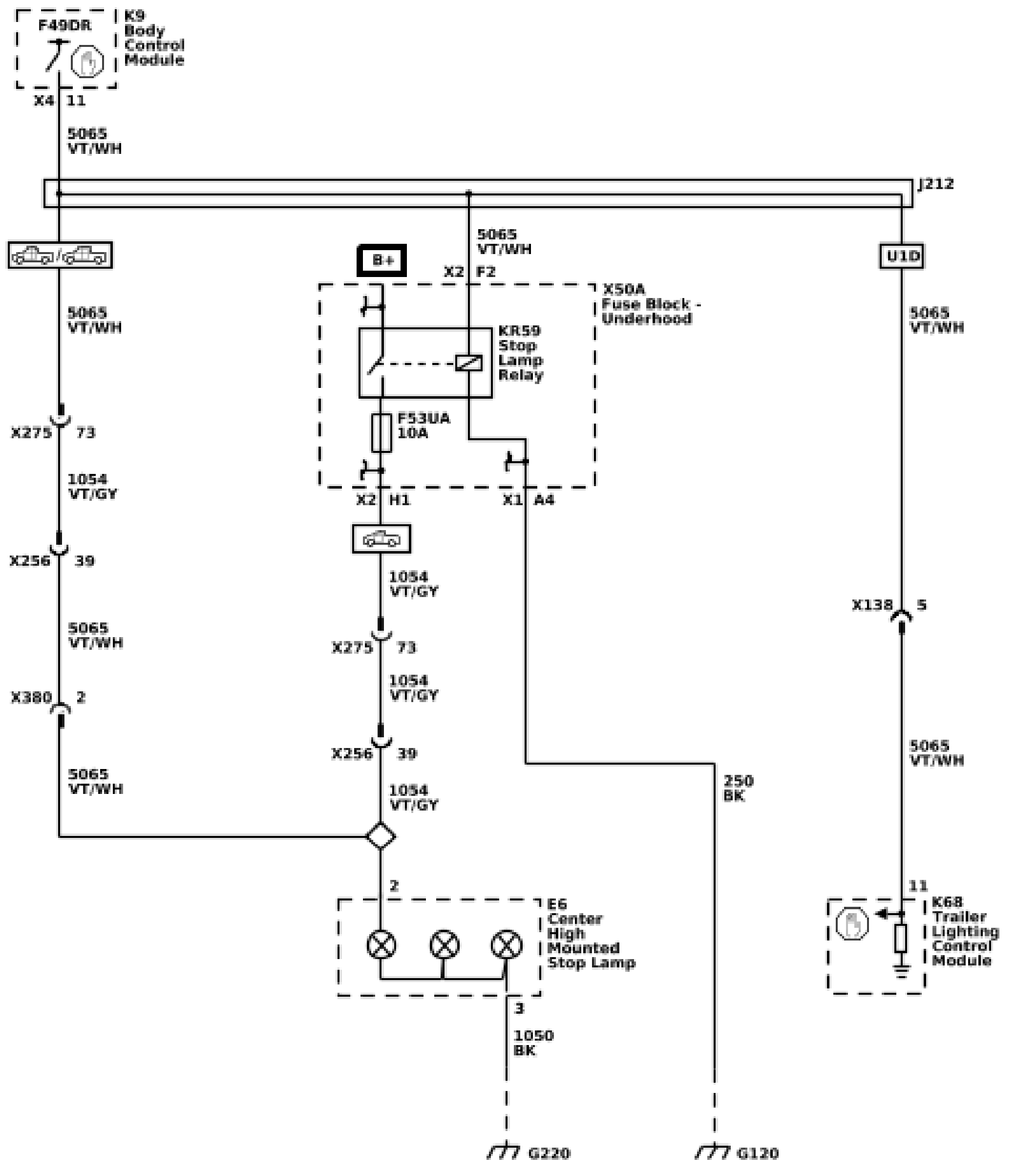
5502012

Exterior Lights Schematics (Tail Lamp Assemblies (ZW9))

5502013

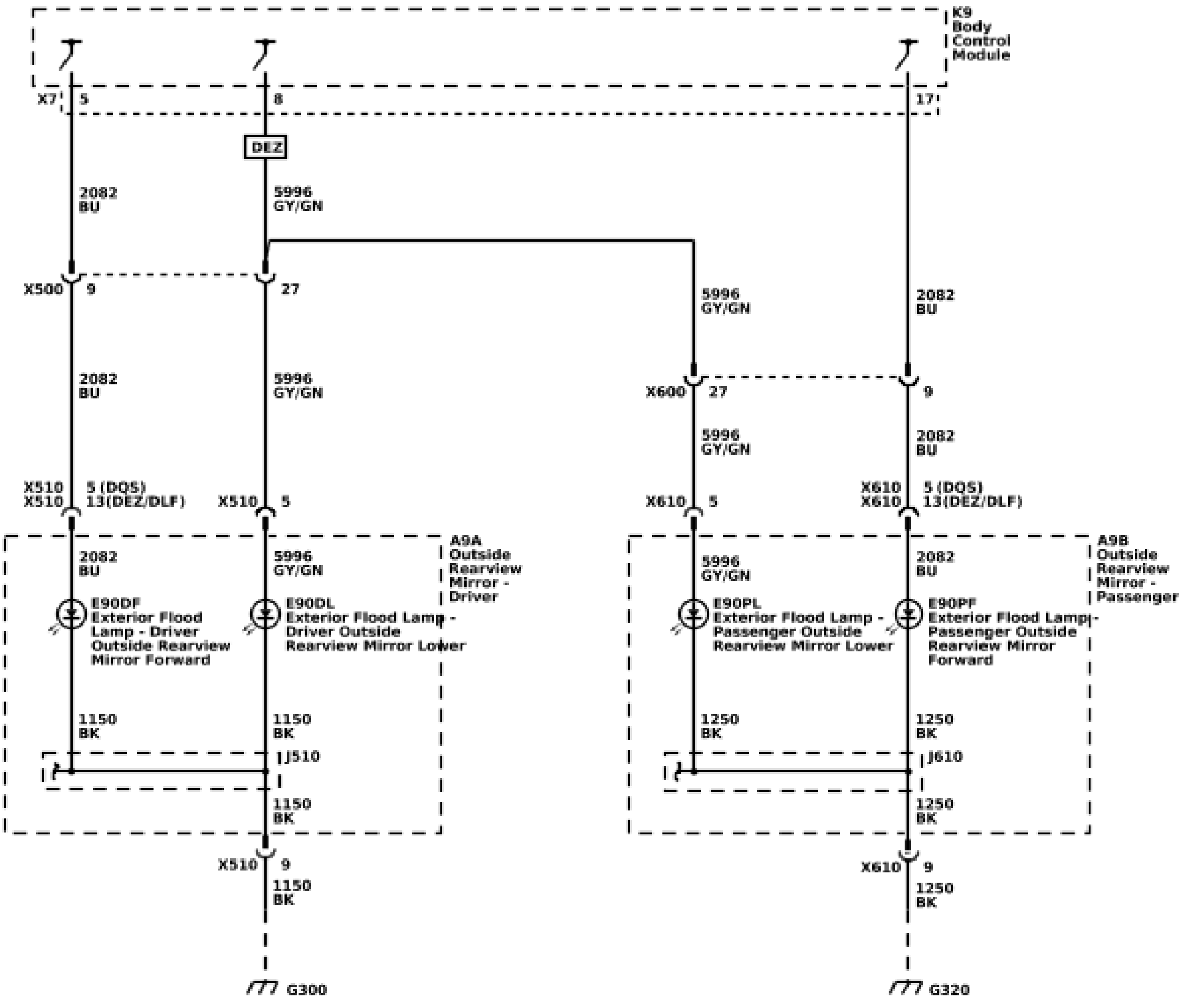

K9 Body Control Module
F10DR
X4 4
19 BN/GN
22
45 BU
X2 H6
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
86
85
30
87
F42UA 10A
A4
F34UA 10A
A2
KR61 Trailer Backup Lamps Relay
F54UA 10A
X4 B1
B+
F12DR
26
38 BU/BN
X2 F3
F10DR
X5 1
18 YE/BU
309 GY/BN
24 GN/WH
709 VT/GY
E42R Tail Lamp Assembly - Right
5
1
4
X420
E5T Tail/Stop and Turn Signal Lamp - Right
E5B Backup Lamp - Right
6
X420
1750 BK
G415
E42L Tail Lamp Assembly - Left
E5A Backup Lamp - Left
E5S Tail/Stop and Turn Signal Lamp - Left
X410
6
1450 BK
G405

Exterior Lights Schematics (Center High Mounted Stop Lamp)


F49DR
K9 Body Control Module
X4 11
5065 VT/WH
J212
B+
5065 VT/WH
X2 F2
X50A Fuse Block - Underhood
KR59 Stop Lamp Relay
F53UA 10A
X2 H1
X1 A4
U1D
5065 VT/WH
X275 73
1054 VT/GY
X256 39
5065 VT/WH
X380 2
5065 VT/WH
1054 VT/GY
X275 73
1054 VT/GY
X256 39
1054 VT/GY
250 BK
X138 5
5065 VT/WH
2
E6 Center High Mounted Stop Lamp
3
1050 BK
11
K68 Trailer Lighting Control Module
G220
G120

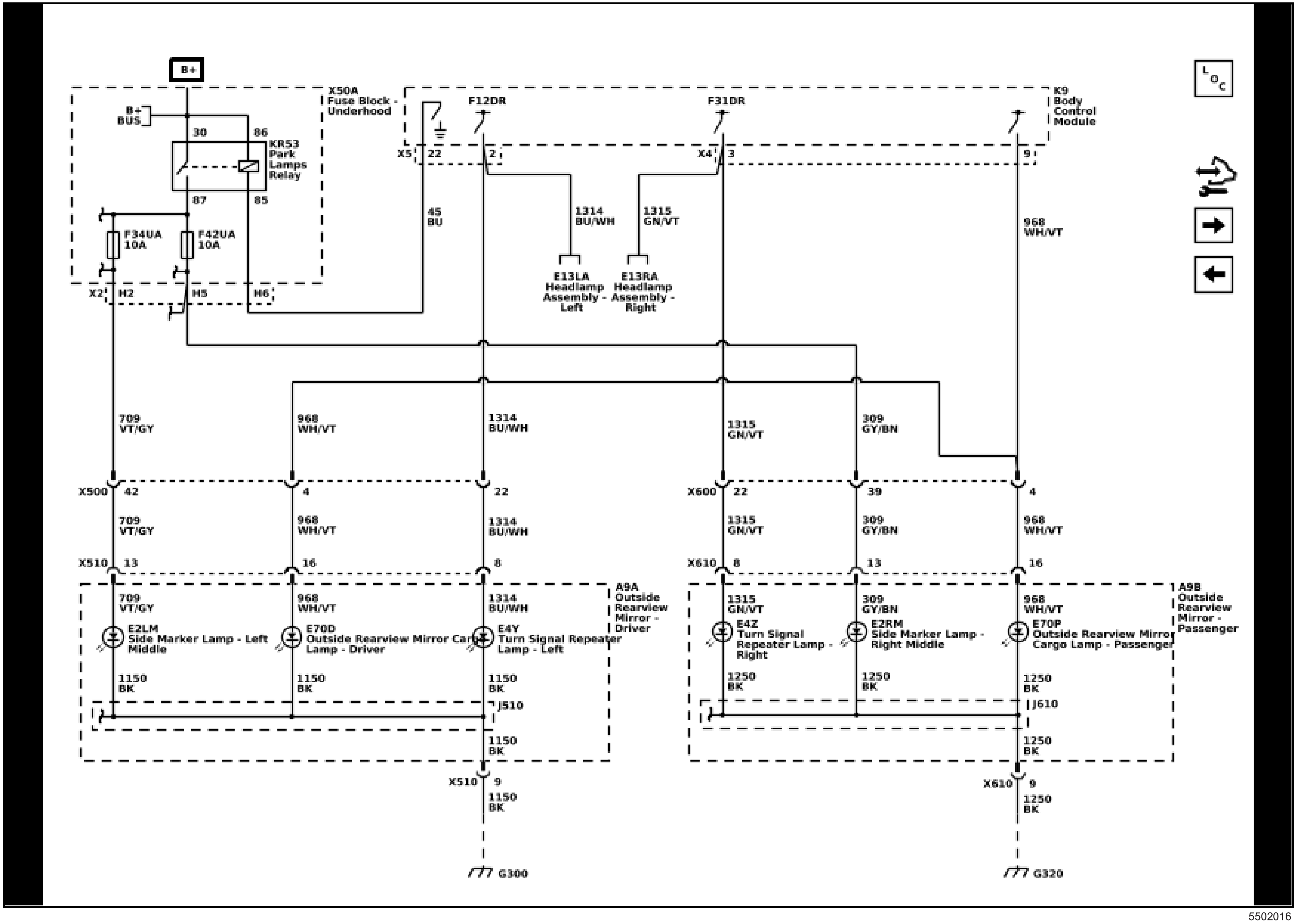
5502014

Exterior Lights Schematics (Mirrors (1 of 2) (DEZ/DLF/DQS))

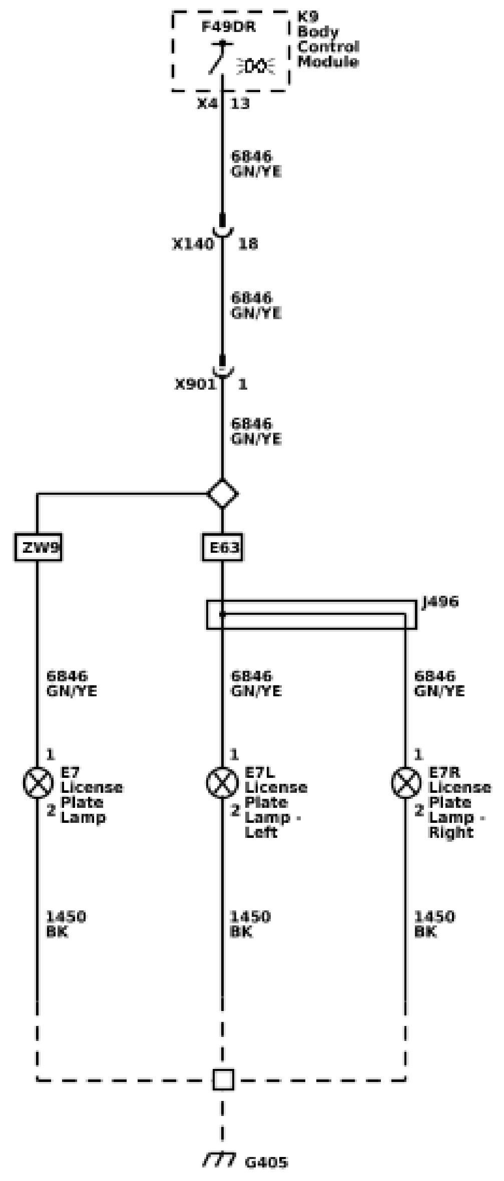

K9
Body
Control
Module
X7
5
8
17
DEZ
2082
BU
5996
GY/GN
X500
9
27
X600
27
9
X510
5 (DQS)
13(DEZ/DLF)
X510
5
X610
5
X610
5 (DQS)
13(DEZ/DLF)
A9A
Outside
Rearview
Mirror -
Driver
A9B
Outside
Rearview
Mirror -
Passenger
E90DF
Exterior Flood
Lamp - Driver
Outside Rearview
Mirror Forward
E90DL
Exterior Flood Lamp -
Driver Outside
Rearview Mirror Lower
E90PL
Exterior Flood Lamp -
Passenger Outside
Rearview Mirror Lower
E90PF
Exterior Flood Lamp -
Passenger Outside
Rearview Mirror
Forward
1150
BK
1250
BK
J510
J610
X510
9
X610
9
G300
G320

5502015

Exterior Lights Schematics (Mirrors (2 of 2) (DPO/DQS))

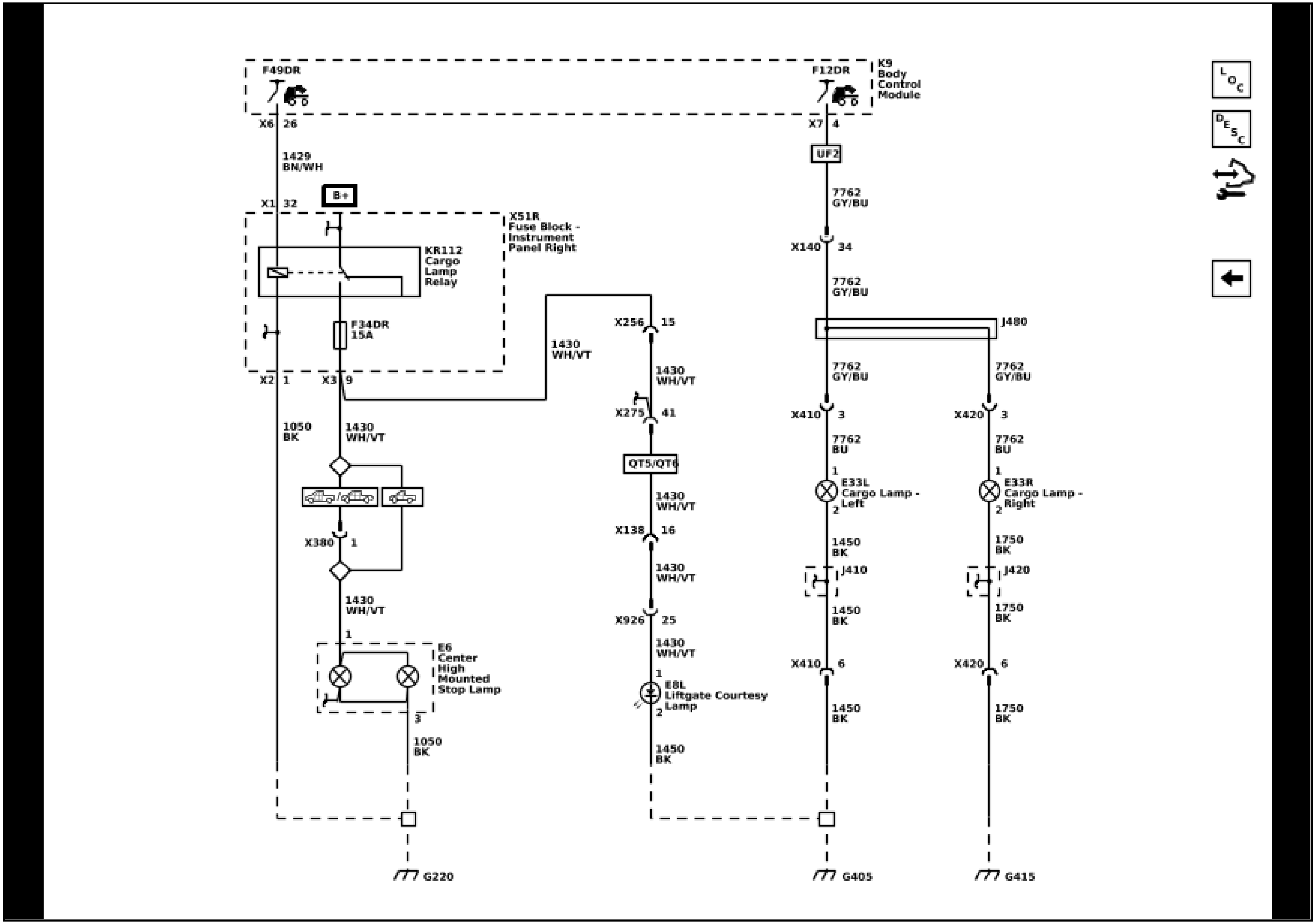

B+
X50A
Fuse Block - Underhood
B+ BUS
30
86
KR53
Park Lamps Relay
87
85
F34UA 10A
F42UA 10A
X2
H2
H5
H6
K9
Body Control Module
F12DR
F31DR
X5
22
2
X4
3
9
45 BU
1314 BU/WH
1315 GN/VT
968 WH/VT
E13LA Headlamp Assembly - Left
E13RA Headlamp Assembly - Right
709 VT/GY
968 WH/VT
1314 BU/WH
1315 GN/VT
309 GY/BN
X500
42
4
22
X600
22
39
4
709 VT/GY
968 WH/VT
1314 BU/WH
1315 GN/VT
309 GY/BN
968 WH/VT
X510
13
16
8
X610
8
13
16
A9A
Outside Rearview Mirror - Driver
709 VT/GY
968 WH/VT
1314 BU/WH
E2LM
Side Marker Lamp - Left Middle
E70D
Outside Rearview Mirror Cargo Lamp - Driver
E4Y
Turn Signal Repeater Lamp - Left
1150 BK
1150 BK
1150 BK
J510
1150 BK
X510
9
1150 BK
G300
A9B
Outside Rearview Mirror - Passenger
1315 GN/VT
309 GY/BN
968 WH/VT
E4Z
Turn Signal Repeater Lamp - Right
E2RM
Side Marker Lamp - Right Middle
E70P
Outside Rearview Mirror Cargo Lamp - Passenger
1250 BK
1250 BK
1250 BK
J610
1250 BK
X610
9
1250 BK
G320
5502016

Exterior Lights Schematics (License Plate Lamps)


F49DR
K9
Body
Control
Module
X4 13
6846
GN/YE
X140 18
6846
GN/YE
X901 1
6846
GN/YE
ZW9
E63
J496
6846
GN/YE
6846
GN/YE
6846
GN/YE
1
E7
License
Plate
Lamp
2
1
E7L
License
Plate
Lamp -
Left
2
1
E7R
License
Plate
Lamp -
Right
2
1450
BK
1450
BK
1450
BK
G405

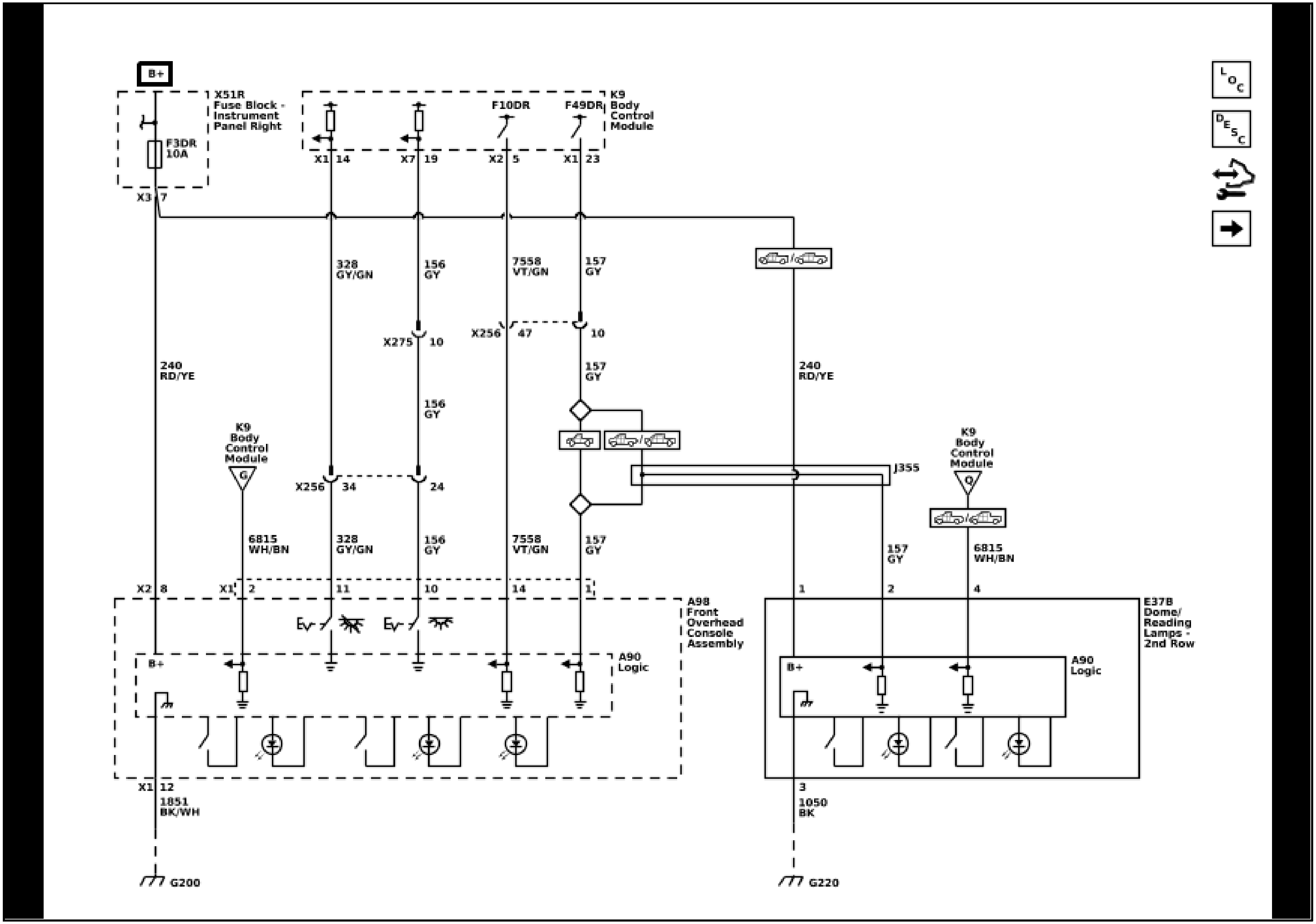
5502017

Exterior Lights Schematics (Cargo Lamps (UF2))


F49DR
F12DR
K9
Body
Control
Module
X6 26
X7 4
UF2
1429
BN/WH
7762
GY/BU
X1 32
B+
X51R
Fuse Block -
Instrument
Panel Right
X140 34
KR112
Cargo
Lamp
Relay
7762
GY/BU
J480
F34DR
15A
X256 15
1430
WH/VT
1430
WH/VT
7762
GY/BU
7762
GY/BU
X2 1
X3 9
X275 41
X410 3
X420 3
1050
BK
1430
WH/VT
7762
BU
7762
BU
QT5/QT6
1
E33L
Cargo Lamp -
Left
2
1
E33R
Cargo Lamp -
Right
2
1430
WH/VT
X380 1
X138 16
1450
BK
1750
BK
J410
J420
1430
WH/VT
1430
WH/VT
1450
BK
1750
BK
X926 25
1
1430
WH/VT
X410 6
X420 6
E6
Center
High
Mounted
Stop Lamp
1
E8L
Liftgate Courtesy
Lamp
2
3
1450
BK
1750
BK
1050
BK
1450
BK
G220
G405
G415

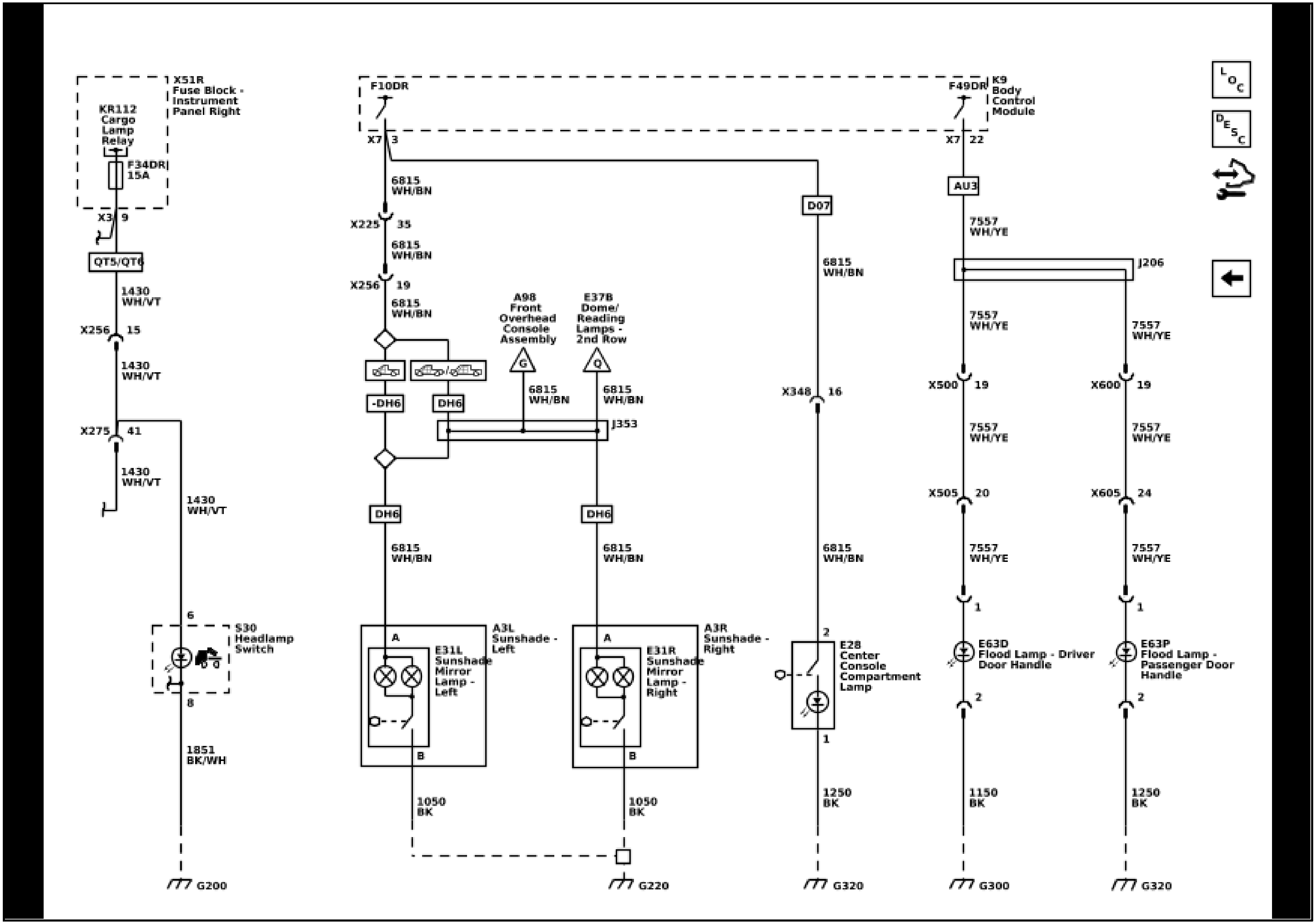
5502018

Interior Lights Schematics (Controls and Overhead Lamps)


B+
X51R
Fuse Block - Instrument Panel Right
F3DR
10A
X3 7
K9
Body
Control
Module
F10DR
F49DR
X1 14
X7 19
X2 5
X1 23
328
GY/GN
156
GY
7558
VT/GN
157
GY
X275 10
X256 47
10
240
RD/YE
K9
Body
Control
Module
G
X256 34
24
J355
K9
Body
Control
Module
Q
6815
WH/BN
X2 8
X1 2
11
10
14
1
A98
Front
Overhead
Console
Assembly
A90
Logic
B+
1
2
4
E37B
Dome/
Reading
Lamps -
2nd Row
X1 12
1851
BK/WH
3
1050
BK
G200
G220
LOC
DESC

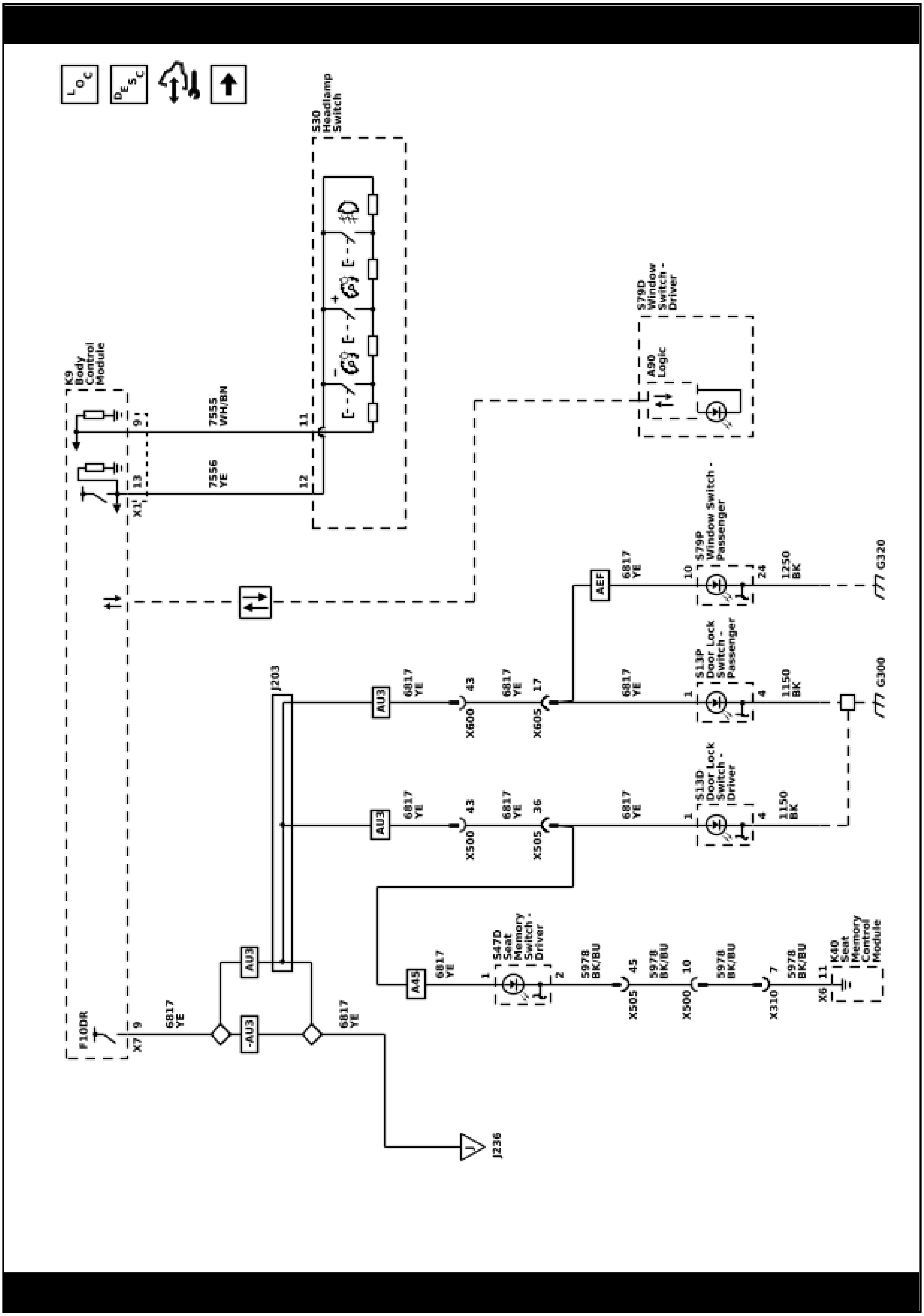
5502019

Interior Lights Schematics (Cargo Lamp Indicator, Sunshade, Center Console, and Door Lamps)

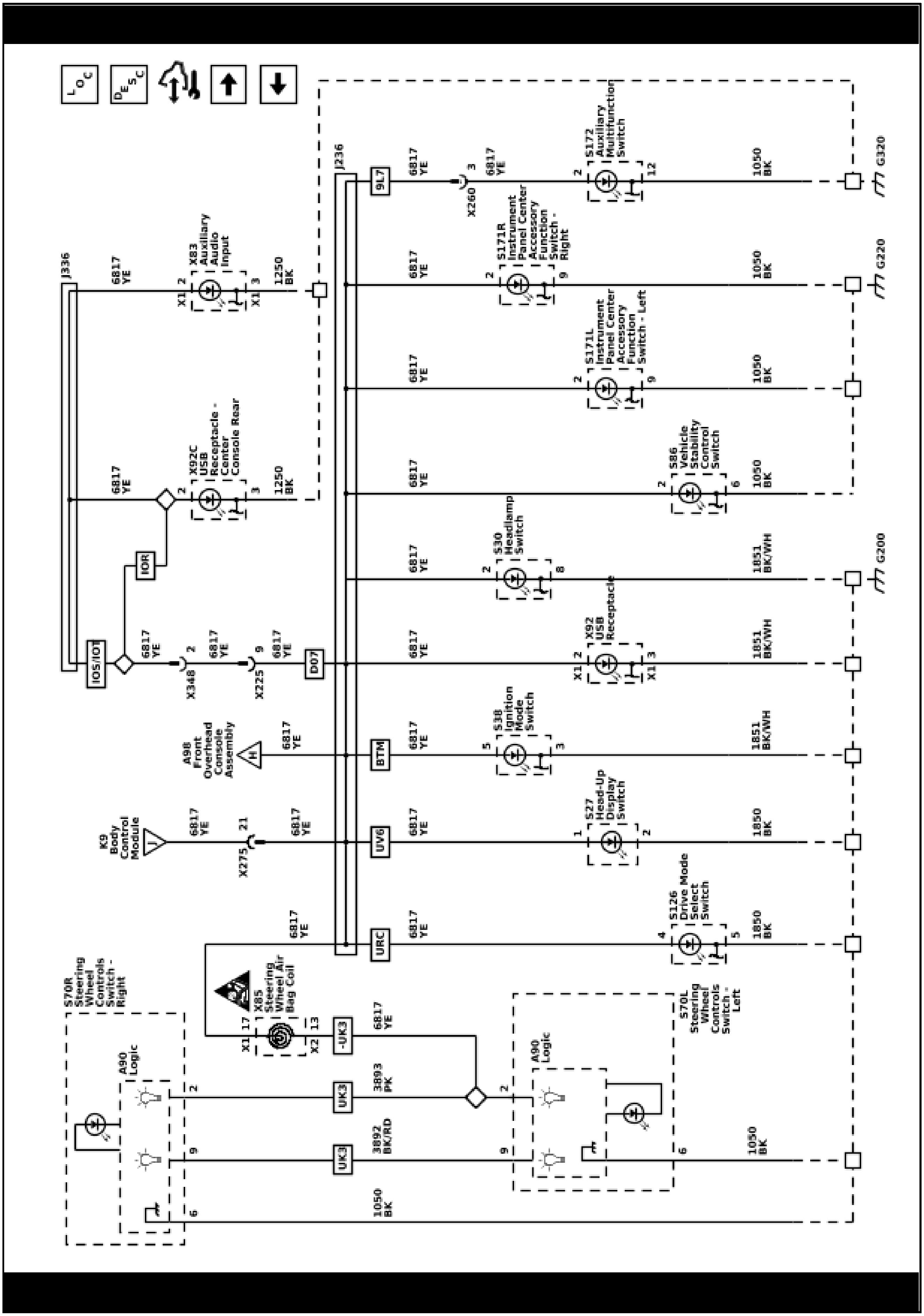

X51R Fuse Block - Instrument Panel Right
KR112 Cargo Lamp Relay
F34DR 15A
X3 9
QT5/QT6
1430 WH/VT
X256 15
1430 WH/VT
X275 41
1430 WH/VT
1430 WH/VT
6
S30 Headlamp Switch
8
1851 BK/WH
G200
F10DR
X7 3
6815 WH/BN
X225 35
6815 WH/BN
X256 19
6815 WH/BN
-DH6
DH6
A98 Front Overhead Console Assembly
G
E37B Dome/ Reading Lamps - 2nd Row
Q
6815 WH/BN
6815 WH/BN
J353
DH6
DH6
6815 WH/BN
6815 WH/BN
A
E31L Sunshade Mirror Lamp - Left
A3L Sunshade - Left
B
1050 BK
A
E31R Sunshade Mirror Lamp - Right
A3R Sunshade - Right
B
1050 BK
G220
D07
6815 WH/BN
X348 16
6815 WH/BN
2
E28 Center Console Compartment Lamp
1
1250 BK
G320
F49DR
K9 Body Control Module
X7 22
AU3
7557 WH/YE
J206
7557 WH/YE
X500 19
7557 WH/YE
X505 20
7557 WH/YE
1
E63D Flood Lamp - Driver Door Handle
2
1150 BK
G300
7557 WH/YE
X600 19
7557 WH/YE
X605 24
7557 WH/YE
1
E63P Flood Lamp - Passenger Door Handle
2
1250 BK
G320
L O C
D E S C

5502020

Interior Lights Dimming Schematics (Controls and Backlights (1 of 2))

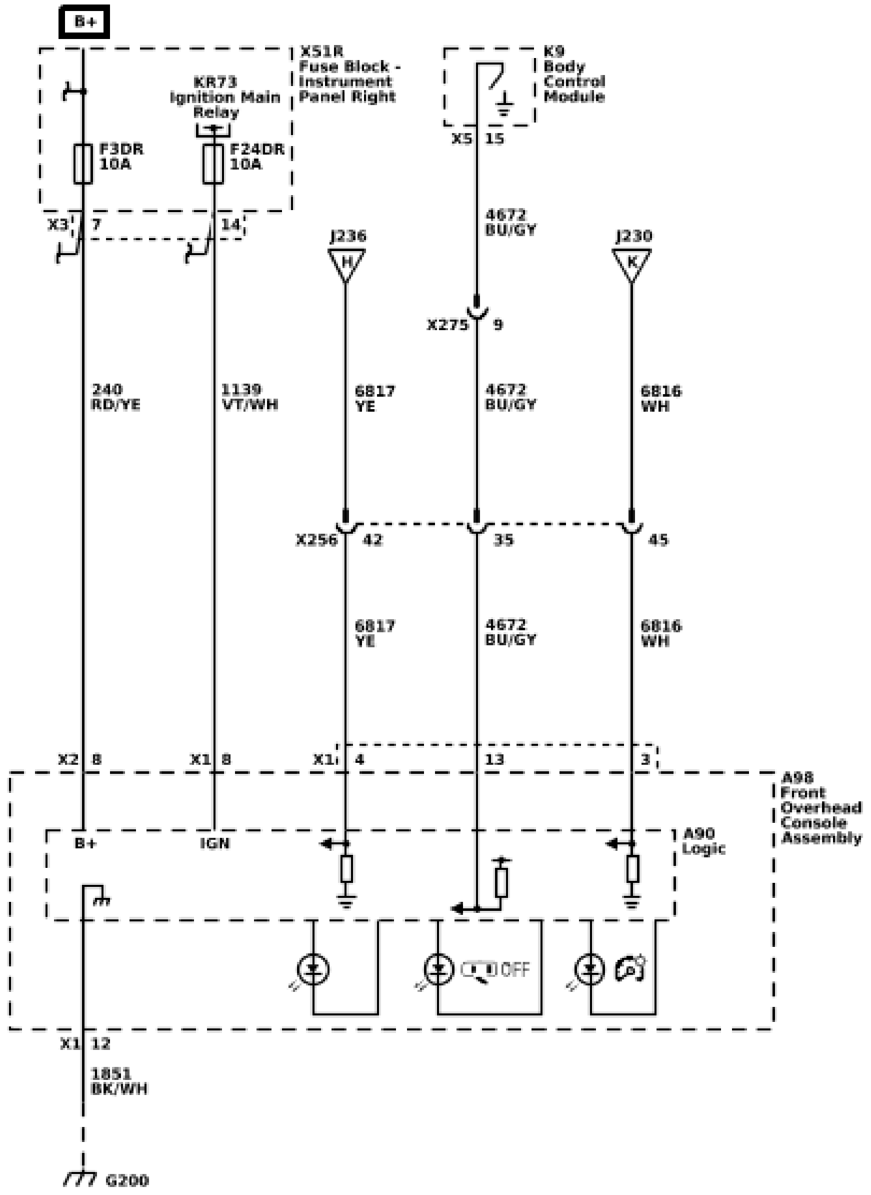

5502021
K9 Body Control Module
S30 Headlamp Switch
7555 WH/BN
7556 YE
X1 13
9
11
12
F10DR
X7 9
6817 YE
AU3
-AU3
J203
J236
AU3
X600 43
X605 17
X500 43
X505 36
AEF
A45
S79D Window Switch - Driver
A90 Logic
S79P Window Switch - Passenger
10
24
1250 BK
G320
S13P Door Lock Switch - Passenger
1
4
1150 BK
G300
S13D Door Lock Switch - Driver
S47D Seat Memory Switch - Driver
2
5978 BK/BU
X505 45
X500 10
X310 7
X6 11
K40 Seat Memory Control Module

Interior Lights Dimming Schematics (Backlights (2 of 2))


J336
J236
6817 YE
X83 Auxiliary Audio Input
X1 2
X1 3
1250 BK
X92C USB Receptacle - Center Console Rear
IOR
IOS/IOT
X348
X225
D07
A98 Front Overhead Console Assembly
H
K9 Body Control Module
J
X275
21
BTM
UV6
URC
9L7
X260
S172 Auxiliary Multifunction Switch
S171R Instrument Panel Center Accessory Function Switch - Right
S171L Instrument Panel Center Accessory Function Switch - Left
S86 Vehicle Stability Control Switch
S30 Headlamp Switch
X92 USB Receptacle
S38 Ignition Mode Switch
S27 Head-Up Display Switch
S126 Drive Mode Select Switch
1050 BK
1851 BK/WH
1850 BK
G320
G220
G200
S70R Steering Wheel Controls Switch - Right
A90 Logic
X85 Steering Wheel Air Bag Coil
X1 17
X2 13
-UK3
UK3
3893 PK
3892 BK/RD
S70L Steering Wheel Controls Switch - Left
L O C
D E S C

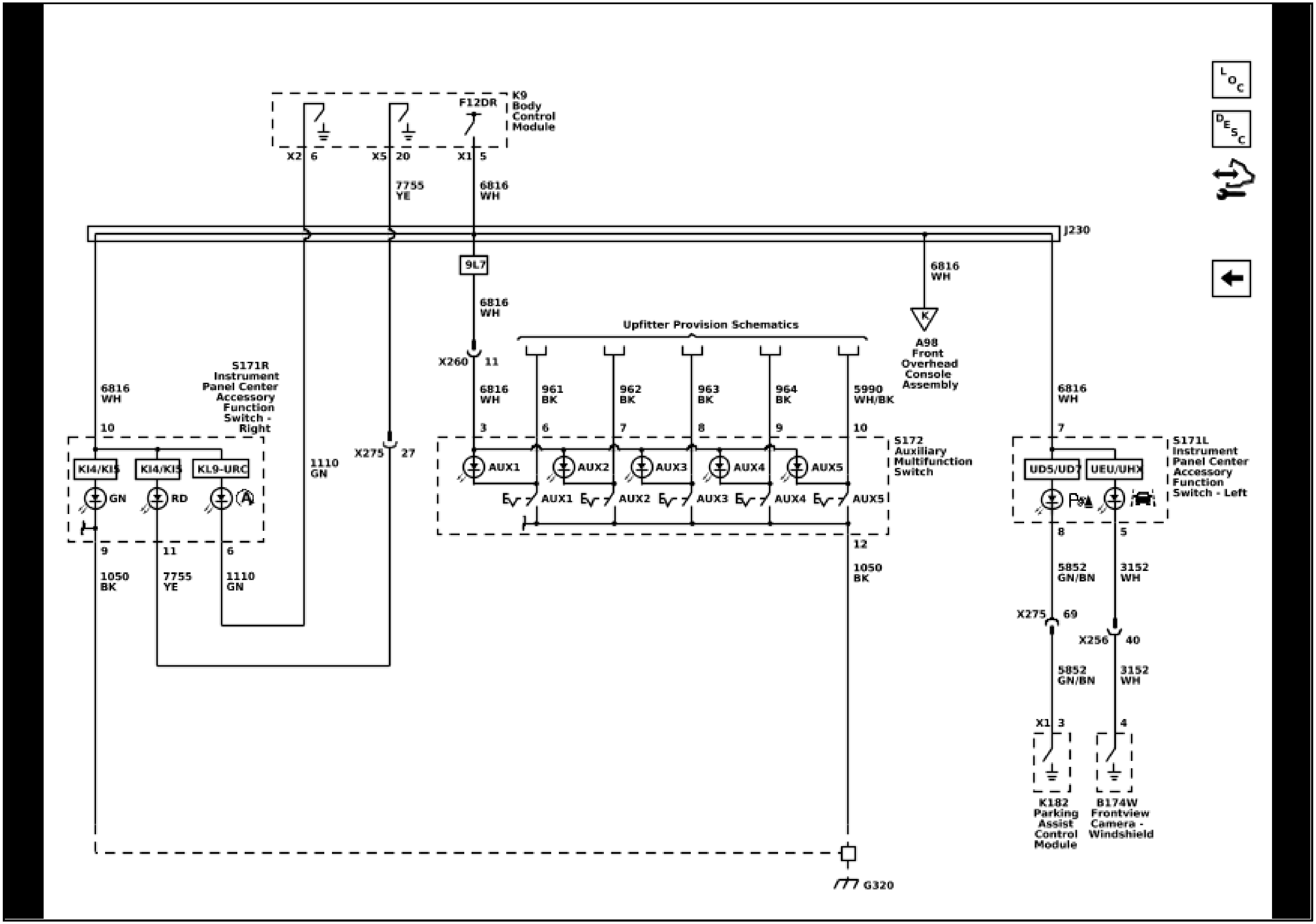
5502022

Interior Lights Dimming Schematics (Front Overhead Console Assembly)


B+
X51R
Fuse Block -
Instrument
Panel Right
KR73
Ignition Main
Relay
F3DR
10A
F24DR
10A
X3
7
14
K9
Body
Control
Module
X5
15
4672
BU/GY
J236
H
J230
K
X275
9
240
RD/YE
1139
VT/WH
6817
YE
4672
BU/GY
6816
WH
X256
42
35
45
6817
YE
4672
BU/GY
6816
WH
X2
8
X1
8
X1
4
13
3
A98
Front
Overhead
Console
Assembly
B+
IGN
A90
Logic
OFF
X1
12
1851
BK/WH
G200

5502023

Interior Lights Dimming Schematics (Indicators)


K9
Body
Control
Module
F12DR
X2 6
X5 20
X1 5
7755
YE
6816
WH
J230
9L7
6816
WH
X260 11
6816
WH
Upfitter Provision Schematics
961
BK
962
BK
963
BK
964
BK
5990
WH/BK
3
6
7
8
9
10
S172
Auxiliary
Multifunction
Switch
AUX1
AUX2
AUX3
AUX4
AUX5
12
1050
BK
G320
A98
Front
Overhead
Console
Assembly
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
10
KI4/KIS
KI4/KIS
KL9-URC
GN
RD
9
11
6
1050
BK
7755
YE
1110
GN
X275 27
1110
GN
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
7
UD5/UD7
UEU/UHX
8
5
5852
GN/BN
3152
WH
X275 69
X256 40
5852
GN/BN
3152
WH
X1 3
4
K182
Parking
Assist
Control
Module
B174W
Frontview
Camera -
Windshield
5502024

Description and Operation

Exterior Lighting Systems Description and Operation

The exterior lighting system consist of the following lamps:

- Automatic high beam assist
- Backup lamps
- Daytime running lamps
- Front fog lamps
- Hazard warning lamps
- Headlamps
- Park, tail, license, and marker lamps
- Stop lamps
- Turn signal lamps
- Trailer lighting

Low Beam Headlamps

The headlamps may be turned ON in 3 different ways:

- When the headlamp switch is placed in the ON position, for normal operation
- When the headlamp switch is placed in the AUTO position, for automatic lamp control
- When the headlamp switch is placed in the AUTO position, with the windshield wipers ON in daylight conditions, after a 6 second delay

The BCM will also command the low beam headlamps ON during daylight conditions when the following conditions are met:

- Headlamp switch in the AUTO position
- Windshield wipers ON
- Vehicle in any gear but PARK

When the BCM commands the low beam headlamps ON, the vehicle operator will notice the interior backlighting for the instrument cluster and the various switches with backlighting control will dim to the level of brightness selected by the instrument panel dimmer switch.

The body control module (BCM) monitors three signal circuits from the headlamp switch. When the headlamp switch is in the AUTO position, all three signal circuits are open. When placed in the AUTO position, the BCM monitors inputs from the ambient light sensor to determine if headlamps are required or if daytime running lamps will be activated based on outside lighting conditions. When the headlamp switch is placed in the OFF position, the headlamp switch headlamps OFF signal circuit is grounded, indicating to the BCM that the exterior lamps should be turned OFF. With the headlamp switch in the PARK position, the headlamp switch park lamps ON signal circuit is grounded, indicating that the park lamps have been requested. When the headlamp switch is placed in the HEADLAMP position, both the headlamp switch park lamps ON signal circuit and the headlamp switch headlamps ON signal circuit are grounded. The BCM responds to the inputs by illuminating the park lamps and headlamps. When the low beam headlamps are requested, the BCM applies B+ to both low beam headlamp control circuits illuminating the low beam headlamps.

High Beam Headlamps

When the low beam headlamps are ON and the turn signal/multifunction switch is placed in the high beam position, ground is applied to the BCM through the high beam signal circuit. The BCM responds to the high beam request by applying ground to the high beam relay control circuit which energizes the high beam relay. With the high beam relay energized, the switch contacts close allowing battery voltage to flow through the high beam fuse to the high beam control circuits to there respective high beam solenoid actuators located within the headlamp assemblies. With the left and right high beam solenoid actuators active, the solenoid shutters open in each headlamp assembly exposing the remaining portion of the headlamp that was covered by the shutters illuminating the high beams at full intensity.

Automatic High Beam Assist (AHBA)

The automatic high beam assist (AHBA) system operates the high beam headlamps ON and OFF automatically when the system is activated and certain conditions are met. The AHBA system consists of a front camera module that detects light and is able to identify approaching vehicles on an even, straight road at a distance of greater than 0.4 km (0.25 mi). The front camera module analyzes light color, intensity, and movement. The AHBA system will turn OFF the high beam headlamps when approaching vehicle headlamps or preceding vehicle taillights are detected by the front camera module. AHBA can be deactivated when the headlamp dimmer switch is moved from the neutral position to the high beam or flash to pass positions. AHBA can be reactivated by operating the high beam select switch from the neutral position to the high beam position twice within 2 seconds.

AHBA System Activation

- Vehicle ON
- Headlamp switch placed in the AUTO position
- Headlamp dimmer switch must be in the neutral position
- Outside lighting conditions must be dark
- Vehicle speed greater than 25 mph (40 km/h)

AHBA System Operation

The following are conditions that the AHBA system will turn the high beam headlamps off during operation:

- The system detects approaching traffic headlamps
- The system detects preceding traffic tail lamps
- Ambient light level too high due to towns or twilight situations
- The vehicle’s speed drops below 13 mph (22 km/h)
- Delay

Note: AHBA may not operate properly if any of the following conditions exist:

- Approaching and preceding vehicles lamps are undetectable due to dirt, snow, road spray, smoke, fog, or any other airborne conditions.
- The front camera module is covered with ice, dirt, snow, haze, or is obstructed.
- The vehicle is being driven on winding or hilly road conditions which would make any on coming vehicle headlamps undetectable by the AHBA.

AHBA System Deactivation

- Manually operating the headlamp dimmer switch from neutral to high beam position
- AHBA is deactivated automatically when the front or rear fog lamps are turned ON

AHBA System Indicator

The status of the AHBA system is shown by a green indicator located on the instrument panel cluster. When AHBA is active, the indicator will be illuminated continuously. If the operator deactivates the AHBA system, the indicator will turn off.

Daytime Running Lamps

The daytime running lamps will illuminate continuously when the following conditions are met:

- The ignition is in the RUN or CRANK position
- The shift lever is out of the PARK position for vehicles equipped with automatic transmissions or the parking brake is released for vehicles with manual transmissions
- The low and high beam headlamps are OFF

The ambient light sensor is used to monitor outside lighting conditions. The ambient light sensor provides a voltage signal that will vary between 0.2 and 4.9 volts depending on outside lighting conditions. The body control module (BCM) provides a 5 V reference signal to the ambient light sensor and the HVAC control module provides a low reference ground. The BCM monitors the ambient light sensor signal circuit to determine if outside lighting conditions are correct for either daytime running lights or automatic lamp control when the headlamp switch is in the AUTO position. In daylight conditions the BCM applies B+ to both daytime running lamp control circuits to the left and right multifunction light emitting diode (LED) control modules located in each headlamp assembly. The multifunction LED control modules respond the to to the B+ input from the BCM by illuminating the left and right daytime running lamp LED’s. Any function or condition that turns on the low beam headlamps will cancel daytime running lamps operation.

Flash to Pass

When the turn signal/multifunction switch is momentarily placed in the flash to pass position, ground is applied to the turn signal/multifunction switch. The turn signal/multifunction switch applies ground to the body control module (BCM) through the flash to pass switch signal circuit. The BCM responds to the flash to pass request by applying ground to the high beam relay control circuit. This energizes the high beam relay, closing the switch side contacts of the high beam relay, applying battery voltage to the 3 pin high beam fuse. Battery voltage is applied from the high beam fuse through the high beam control circuit to the high beam headlamp assemblies. This causes the high beam headlamps to illuminate at full brightness momentarily.

Front Fog Lamps

The front fog lamp relay is supplied with battery voltage at all times. The front fog lamp switch signal circuit is grounded momentarily by pressing the front fog lamp switch. The body control module (BCM) energizes the front fog lamp relay by applying ground to the front fog lamp relay control circuit. When the front fog lamp relay is energized, the relay switch contacts close and battery voltage is applied through the front fog lamp fuse to the front fog lamp supply voltage circuit which illuminates the front fog lamps.

Hazard Lamps

The hazard flashers may be activated in any power mode. The hazard switch signal circuit is momentarily grounded when the hazard switch is pressed. The body control module (BCM) responds to the hazard switch signal input by supplying battery voltage to all four turn signal lamps in an ON and OFF duty cycle. When the hazard switch is activated, the BCM sends a serial data message to the instrument panel cluster requesting both turn signal indicators to be cycled ON and OFF.

The instrument panel dimmer switch controls the brightness of the interior backlighting components. When the instrument panel dimmer switch is placed in a desired brightness position, the body control module (BCM) receives a signal from the instrument panel dimmer switch and responds by applying a pulse width modulated voltage to the hazard switch light emitting diode (LED) backlighting control circuit illuminating the LED to the desired level of brightness.

Park, Tail, and License Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by applying voltage to the park lamps, tail lamps, and license lamps control circuits illuminating the park, tail, and license lamps.

Stop Lamps

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM will apply battery voltage to the left and right stop lamp control circuits as well as the center high mounted stop lamp control circuit illuminating the left and right stop lamps and the center high mounted stop lamp.

Turn Signal Lamps

Ground is applied at all times to the turn signal/multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating voltage to the front and rear turn signal lamps through there respective control circuits. When a turn signal request is received by the BCM, a serial data message is sent to the instrument cluster requesting the respective turn signal indicator be pulsed ON and OFF. Vehicles equipped with LED turn signals use an additional turn outage detection circuit for detecting when a LED turn signal goes out. This circuit is necessary due to the low current draw of LEDs. The turn outage detection circuit allows the module to alert the driver of the vehicle that a turn signal is out.

Backup Lamps

Automatic Transmission

With the engine ON and the transmission in the REVERSE position, the transmission control module (TCM) sends a serial data message to the body control module (BCM). The message indicates that the gear selector is in the REVERSE position. The BCM applies battery voltage to the backup lamps control circuit illuminating the backup lamps. Once the driver moves the gear selector out of the REVERSE position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamps control circuit. The engine must be ON for the backup lamps to operate.

Manual Transmission

The engine control module (ECM) provides a signal circuit to the backup lamp switch which is permanently grounded. With the engine running and the transmission in the reverse position, the backup lamp switch signal circuit is pulled low and the ECM responds by sending a serial data message to the body control module (BCM). The message indicates that the gear selector is in the reverse position. The BCM energizes the backup lamp relay by applying battery voltage to the backup lamp relay control circuit. When the backup lamp relay is energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuses to the backup lamp control circuits which illuminates the backup lamps. Once the driver moves the gear selector out of the reverse position, a message is sent by the ECM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit. The engine must be running for the backup lamps to operate.

Exterior Courtesy Lighting

Cargo Lamps

The cargo lamps are controlled by a cargo lamp relay and a dedicated cargo lamp control circuit from the body control module (BCM). The cargo lamp relay is supplied with ground at all times. The cargo lamp switch signal circuit is grounded momentarily by pressing the cargo lamp switch located within the headlamp switch. The body control module (BCM) responds by energizing the cargo lamp relay by applying battery voltage to the cargo lamp relay control circuit as well as the dedicated cargo lamp control circuit. When the cargo lamp relay is energized, the relay switch contacts close and battery voltage is applied through the cargo lamp fuse to the cargo lamp supply voltage circuit which illuminates the cargo lamps. Cargo lamps are located in the center high mounted stop lamp assembly, truck bed, and tailgate handle when equipped.

Forward Flood Lamps

The flood lamp switch signal circuit is grounded momentarily by pressing the flood lamp switch located within the headlamp switch. The body control module (BCM) responds by applying battery voltage to the exterior flood lamp control circuits which illuminates the forward exterior flood lamps located within the exterior mirror assemblies. If the exterior flood lamps are left on with the vehicle off, the lights will shut off after approximately 10 minutes to prevent total battery discharge. The exterior flood lamps will immediately turn off if the vehicle leaves the parked position.

Lower Flood Lamps

The body control module (BCM) supplies battery voltage to the exterior LED lighting located under each outside rearview mirror for approach lighting. When the keyless entry transmitter is operated to either the lock or unlock functions the LED lighting located under each outside rearview mirror are commanded ON for approach lighting.

Trailer Lighting (With U1D)

The trailer lighting control module is supplied with battery voltage as well as ignition voltage and is permanently grounded. For lighting operation, the trailer lighting control module receives serial data messages from the body control module (BCM) indicating what lamps have been activated on the vehicle. The trailer lighting control module responds by applying voltage to the appropriate control circuits for the requested lamps illuminating the lamps on the attached trailer. The trailer lighting control module constantly monitors for trailer connection status, trailer lighting faults, and trailer theft deterrent purposes, this is accomplished through the lighting circuits of the trailer to determine if a trailer is connected. With the key OFF, the trailer lighting control module will periodically pulse the lighting circuits of the trailer to verify it is still connected. The lights on the trailer may flash at different intervals with the key OFF depending on which type of lights the trailer is built with. If a trailer is disconnected with the key ON, the vehicle will display a trailer disconnected message until a trailer is reconnected or the ignition is cycled.

Backup Lamps

With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message that indicates the gear selector is in the reverse position. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on the Trailer Backup Lamps control circuit when a trailer is connected. Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the Trailer Lighting Control Module to remove battery voltage from the backup lamp control circuit.

Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by sending a serial data message to the Trailer Lighting Control Module. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on the Trailer Park Lamp control circuit when a trailer is connected.

Stop Lamps

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM energizes the stop lamp relay circuit by applying voltage to the stop lamp relay control circuit. The Trailer Lighting Control Module senses the voltage on the stop lamp relay circuit and responds by applying voltage to the X88 Trailer Connector on the left and right Trailer Stop/Turn Signal Lamp control circuits when a trailer is connected.

Turn Signal Lamps

Ground is applied at all times to the turn signal/ multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds by sending a serial data message to the Trailer Lighting Control Module. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on either the left or right Trailer Stop/Turn Signal Lamp control circuits when a trailer is connected.

Trailer Lighting (Without U1D)

Backup Lamps

For backup lamp operation, the backup lamp relay is supplied with battery voltage at all times. With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message to the body control module (BCM). The message indicates that the gear selector is in the reverse position. The BCM energizes the backup lamp relay by applying battery voltage to the backup lamp relay control circuit. When the backup lamp relay is energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuses to the backup lamp control circuits which illuminates the backup lamps. Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit.

Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by applying voltage to the park lamps, tail lamps, license lamps, and trailer park lamps control circuits illuminating the park, tail, license, and trailer park lamps.

Stop Lamps

For stop lamp operation, the left and right trailer stop/ turn signal lamp relay’s are supplied with battery voltage at all times. The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM energizes the left and right trailer stop/turn signal lamp relay’s by applying voltage to the left and right stop lamp relay control circuits. With the left and right trailer stop/turn signal lamp relay’s energized, the relay switch contacts close and battery voltage is applied through the left and right trailer stop/turn signal fuse’s to the trailer stop lamp control circuits which illuminates the trailer stop lamps.

Turn Signal Lamps

For turn signal lamp operation, the left and right trailer stop/turn signal lamp relay’s are supplied with battery voltage at all times. Ground is applied at all times to the turn signal/multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating voltage to the left and right trailer stop/turn signal lamp relay control circuits energizing the relay’s in an ON and OFF cycle. With the left and right trailer stop/turn signal lamp relay’s energized, the relay switch contacts cycle ON and OFF applying battery voltage through the left and right trailer stop/turn signal fuse’s to the trailer turn signal lamp control circuits which illuminates the trailer turn signal lamps in an ON and OFF cycle.

Battery Run Down Protection/ Inadvertent Power

To provide battery run down protection, the exterior lamps will be deactivated automatically under certain conditions. The BCM monitors the state of the headlamp switch. If the park or headlamp switch is ON when the ignition switch is placed in either the CRANK or RUN position and then placed in the OFF position, the BCM initiates a 10 minute timer. At the end of the 10 minutes, the BCM will turn off the control power output to the park lamp controls as well as the headlamp relay coils, deactivating the exterior lamps. This feature will be cancelled if any power mode other than OFF becomes active. The BCM will disable battery run down protection if any of the following conditions exist. The park or headlamp switch is placed in the ON to OFF position, and back to the ON position during battery run down protection. The BCM determined that the park or headlamp switch was not active when the ignition was turned OFF.

Interior Lighting Systems Description and Operation

Interior Lamps

The interior lighting system consist of two groups. This first group includes lamps that may not be dimmed.

- Dome lamps
- Center console compartment lamps
- Reading lamps
- Sunshade mirror lamps

Dome Lamps

The dome lamp switch has 3 positions: DOOR, OFF, and ON. The ON position provides a ground for continuous operation and the dome lamp will remain illuminated until the switch is placed in either the DOOR or OFF position. When in the DOOR position, the dome lamp operation is controlled by the body control module (BCM). When any door is opened, the door ajar switch contacts close and the BCM receives a door-open input. The BCM illuminates the dome lamp when any door is opened or a door lock/unlock request is activated with the key fob. After all doors have been closed, the dome lamp will remain illuminated approximately 3 seconds after the last door closes. When the driver places the dome lamp switch in the OFF position, the dome lamp will be disabled. In the event that the dome lamp were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position and no doors opened, the BCM will deactivate the dome lamp control circuit to prevent total battery discharge. The dome lamps will turn OFF using the theater dimming feature when controlled by the BCM.

Center Console Compartment Lamp

The inadvertent power supply voltage circuit from the BCM provides battery voltage to the center console compartment lamp. When the center console is opened, the center console compartment lamp switch contacts close providing a path to ground and the center console compartment lamp illuminates. If the operator inadvertently leaves the center console compartment door open with the center console compartment lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

Reading Lamps

The inadvertent power supply voltage circuit from the BCM provides battery positive voltage to each reading lamp. When a reading lamp switch is activated, the switch contacts close providing a path to ground and the reading lamp illuminates. If the operator inadvertently leaves a reading lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

Sunshade Mirror Lamps

The inadvertent power supply voltage circuit from the BCM provides battery voltage to each set of sunshade mirror lamps. When the sunshade mirror cover is opened, a switch closes providing ground and the sunshade lamps illuminate. If the operator inadvertently leaves a sunshade mirror cover open with the lamps ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

Keyless Entry Interior Illumination

When the operator uses the keyless entry transmitter in order to unlock the doors, the BCM receives a door-unlock signal. The BCM must receive inputs from various systems that indicate that the ignition switch is OFF, the courtesy lamp switch is OFF, and all doors are closed before the BCM will activate the interior lamps. After all doors have been closed, the courtesy lamps will turn OFF immediately if the ignition switch is turned to the ON position, the door locks are LOCKED, or approximately 20 seconds after the last door closes. The BCM will turn off the courtesy lamps through the theater dimming feature. The BCM keeps the courtesy lamps on for 40 seconds after an alarm event is completed.

Interior Lamps Dimming

The second group includes lamps which may be dimmed. This group may use a combination of light emitting diodes (LED), incandescent lamps, and pulse width modulation (PWM) illumination.

- Dome/reading lamps – front
- Dome/reading lamps – rear
- Door lock switch – driver
- Door lock switch – passenger
- Garage door opener switch
- Headlamp switch
- HVAC control head assembly
- Multifunction switch – instrument panel
- Outside rearview mirror switch
- Park brake switch
- Radio
- Roof beacon switch
- Seat memory switch – driver
- Sliding rear window switch
- Steering wheel control switch – left
- Steering wheel control switch – right
- Sun roof switch
- Sun roof tilt switch
- Transfer case shift control switch
- Trailer brake control switch
- Window switch – driver
- Window switch – passenger

With the headlamp switch in the PARK or HEAD position, the park lamp switch signal circuit provides an input to the body control module (BCM). The BCM responds by applying voltage to the park lamps as well as the backlight dimming control circuits illuminating all components with interior backlighting. All interior backlighting turns ON at the dimming level indicated by the instrument panel dimmer switch. The instrument panel dimmer switch is a momentary type switch and utilizes a resistor ladder to increase and decrease the brightness of the interior backlighting components. The instrument panel dimmer switch provides a voltage signal to the BCM that will increase as the brightness of the lights are increased and decrease as the brightness of the lights are decreased. The BCM provides a low reference signal and a B+ circuit to the instrument panel dimmer switch. When the instrument panel dimmer switch is held in the desired position, the dimmed voltage setting is applied from the instrument panel dimmer switch through the instrument panel dimmer switch signal circuit to the BCM. The BCM interprets the signal and applies a pulse width modulated voltage through the backlighting control circuits illuminating the interior backlighting to the requested level of brightness.

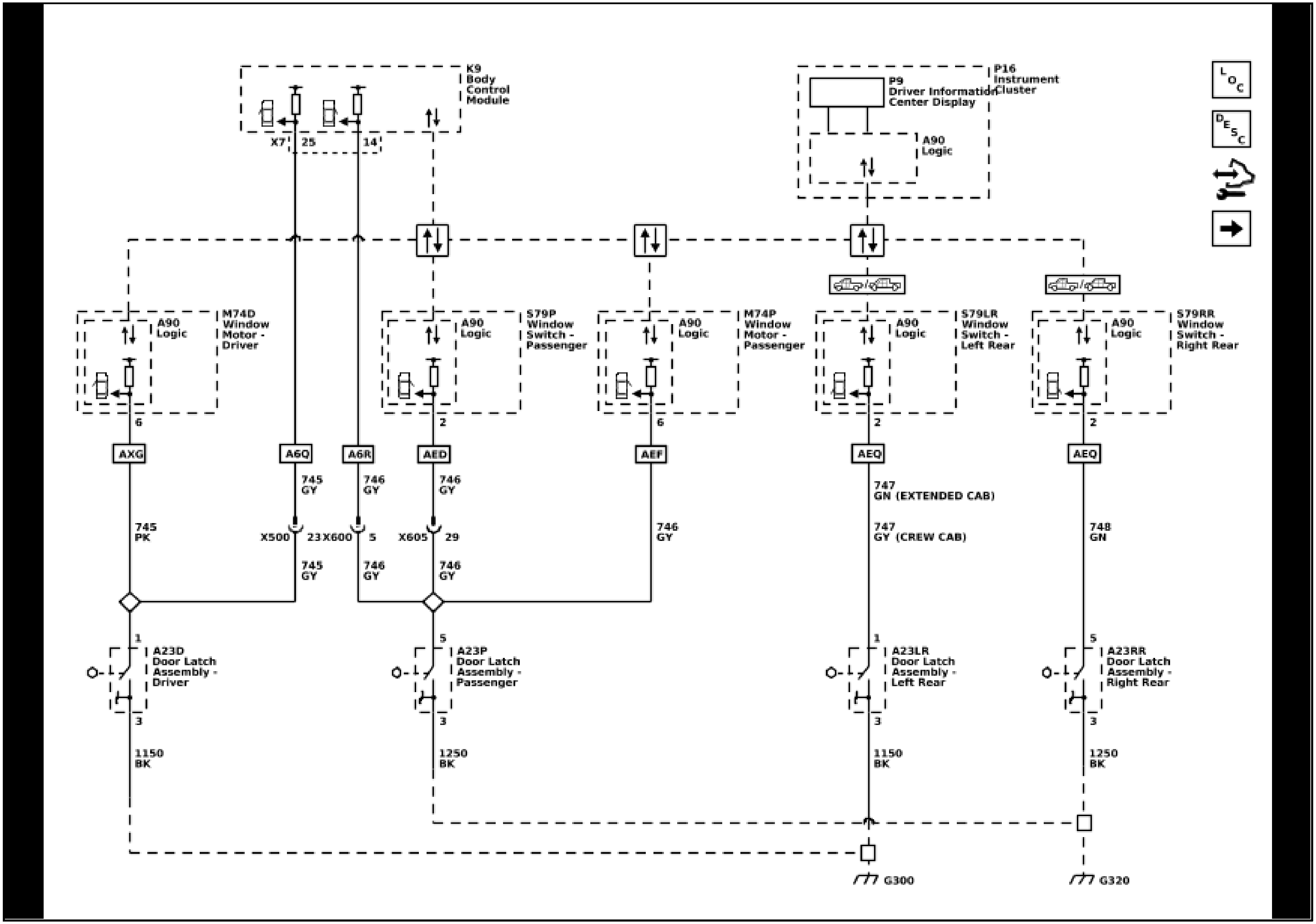
Battery Rundown Protection/ Inadvertent Power

The BCM inadvertent power supply voltage circuit provides battery voltage to all of the interior courtesy lamps. In the event that any of these lamps were to remain illuminated for a period of more than 10 minutes with the ignition switch in the OFF position, the BCM will deactivate the inadvertent power supply voltage circuit to prevent total battery discharge. If the ignition switch is turned to any position other than OFF, or if a lamp switch is activated during this 10 minute period, the timer resets for another 10 minutes.

Vehicle Access

Schematic and Routing Diagrams

Door Lock/Indicator Schematics (Ajar Switches)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Control
Module
X7
25
14
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Center Display
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Logic
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Window
Motor -
Driver
S79P
Window
Switch -
Passenger
M74P
Window
Motor -
Passenger
S79LR
Window
Switch -
Left Rear
S79RR
Window
Switch -
Right Rear
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2
AXG
A6Q
A6R
AED
AEF
AEQ
745
PK
745
GY
746
GY
747
GN (EXTENDED CAB)
747
GY (CREW CAB)
748
GN
X500
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X600
5
X605
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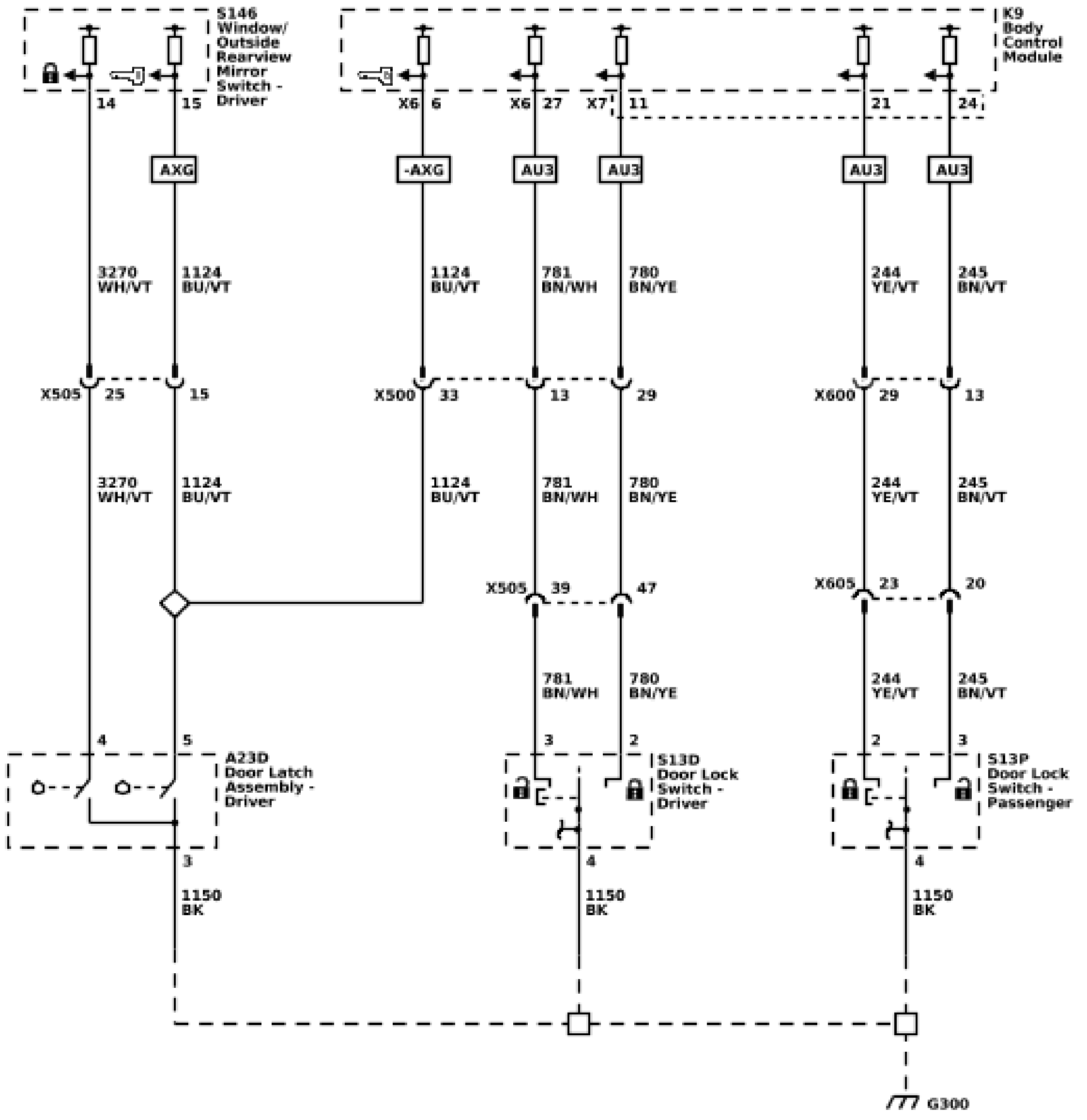
1
5
3
A23D
Door Latch
Assembly -
Driver
A23P
Door Latch
Assembly -
Passenger
A23LR
Door Latch
Assembly -
Left Rear
A23RR
Door Latch
Assembly -
Right Rear
1150
BK
1250
BK
G300
G320
5502030

Door Lock/Indicator Schematics (Controls and Lock Indicators)


S146 Window/ Outside Rearview Mirror Switch - Driver
14
15
AXG
3270 WH/VT
1124 BU/VT
X505
25
15
4
5
A23D Door Latch Assembly - Driver
3
1150 BK
K9 Body Control Module
X6 6
X6 27
X7 11
21
24
-AXG
AU3
1124 BU/VT
781 BN/WH
780 BN/YE
244 YE/VT
245 BN/VT
X500 33
13
29
X600 29
13
X505 39
47
X605 23
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S13P Door Lock Switch - Passenger
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3
4
G300

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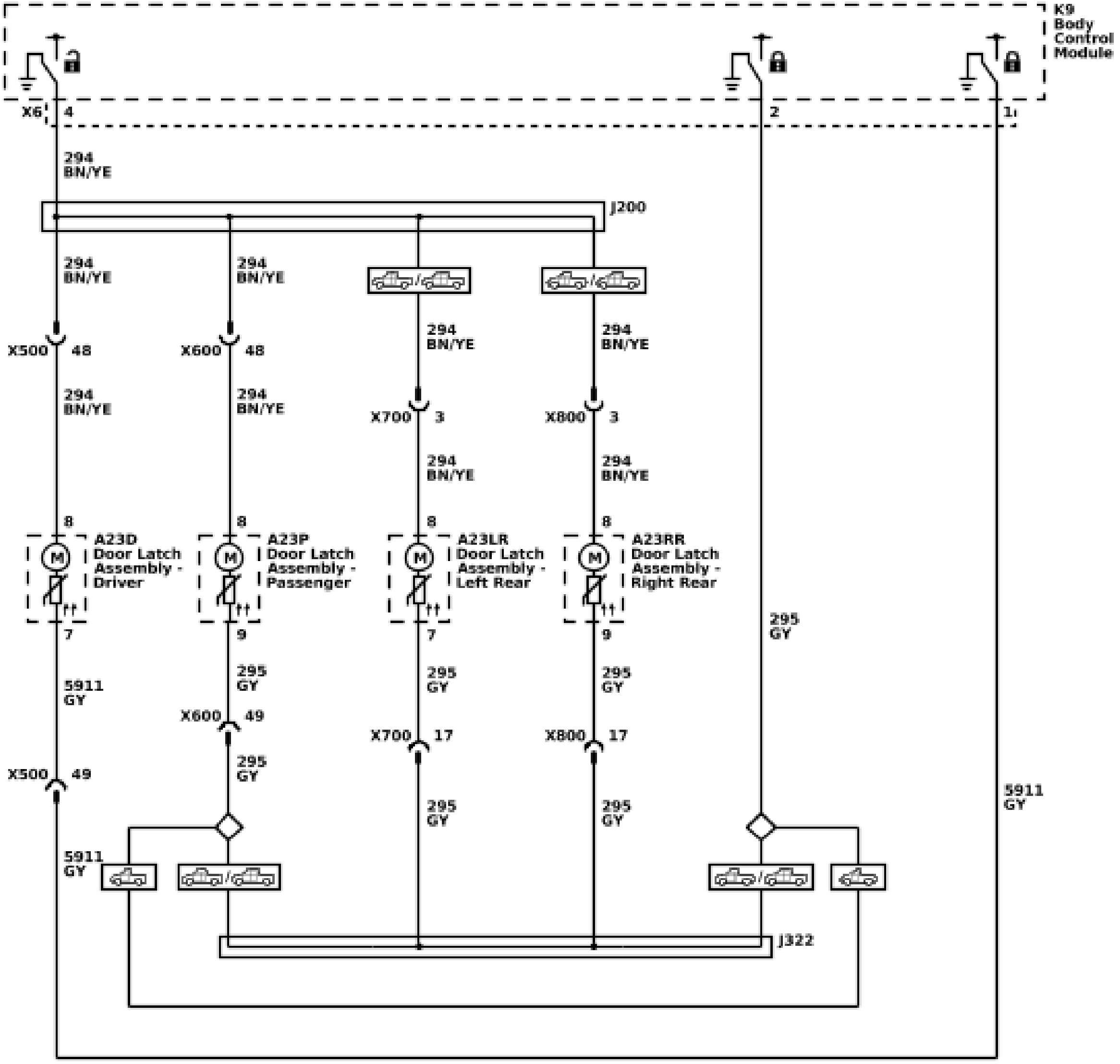
Door Lock/Indicator Schematics (Actuators)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Control
Module
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X500
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X600
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X700
3
X800
3
8
A23D
Door Latch
Assembly -
Driver
A23P
Door Latch
Assembly -
Passenger
A23LR
Door Latch
Assembly -
Left Rear
A23RR
Door Latch
Assembly -
Right Rear
7
9
5911
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X800
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J322

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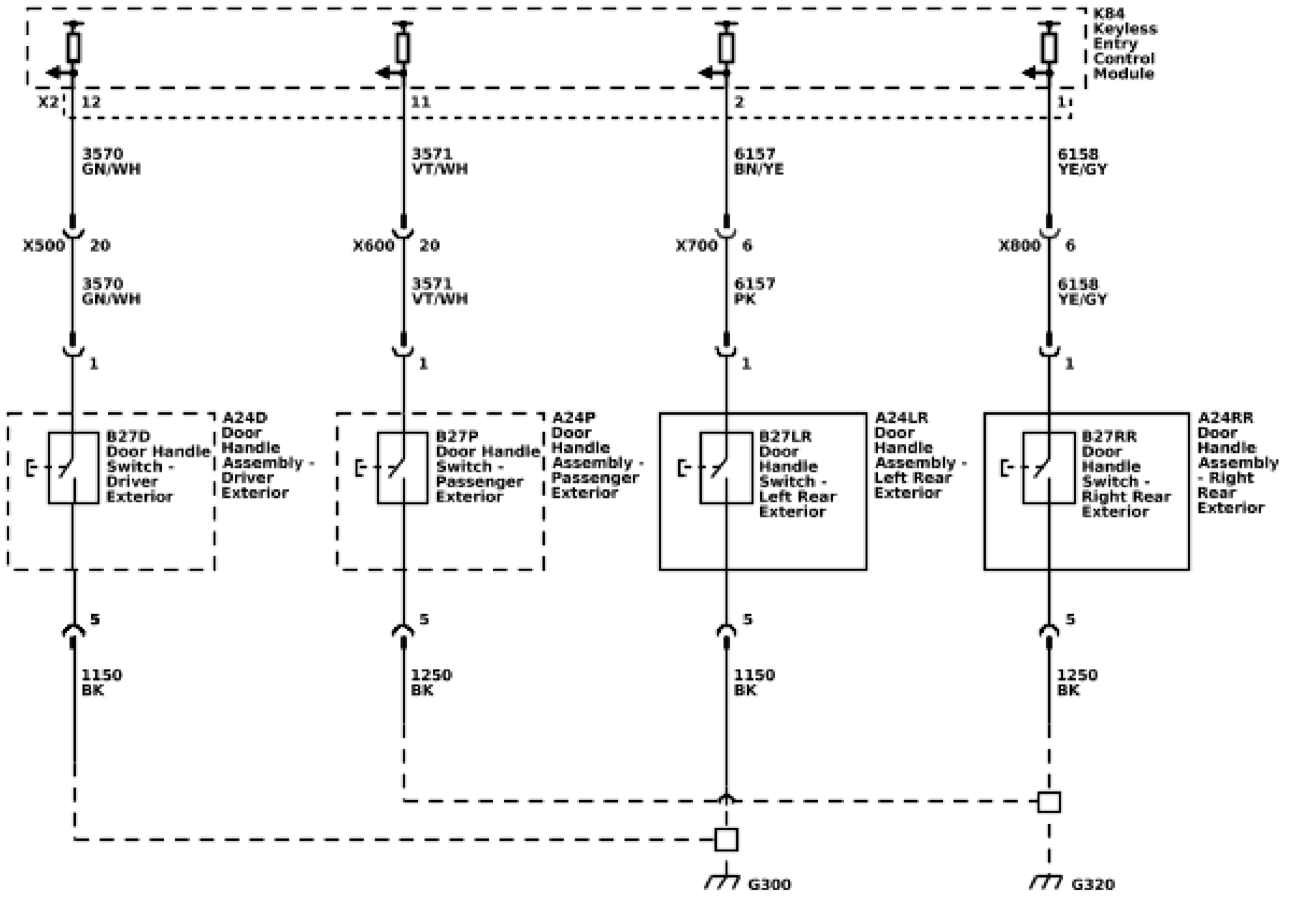
Door Lock/Indicator Schematics (Handle Switches)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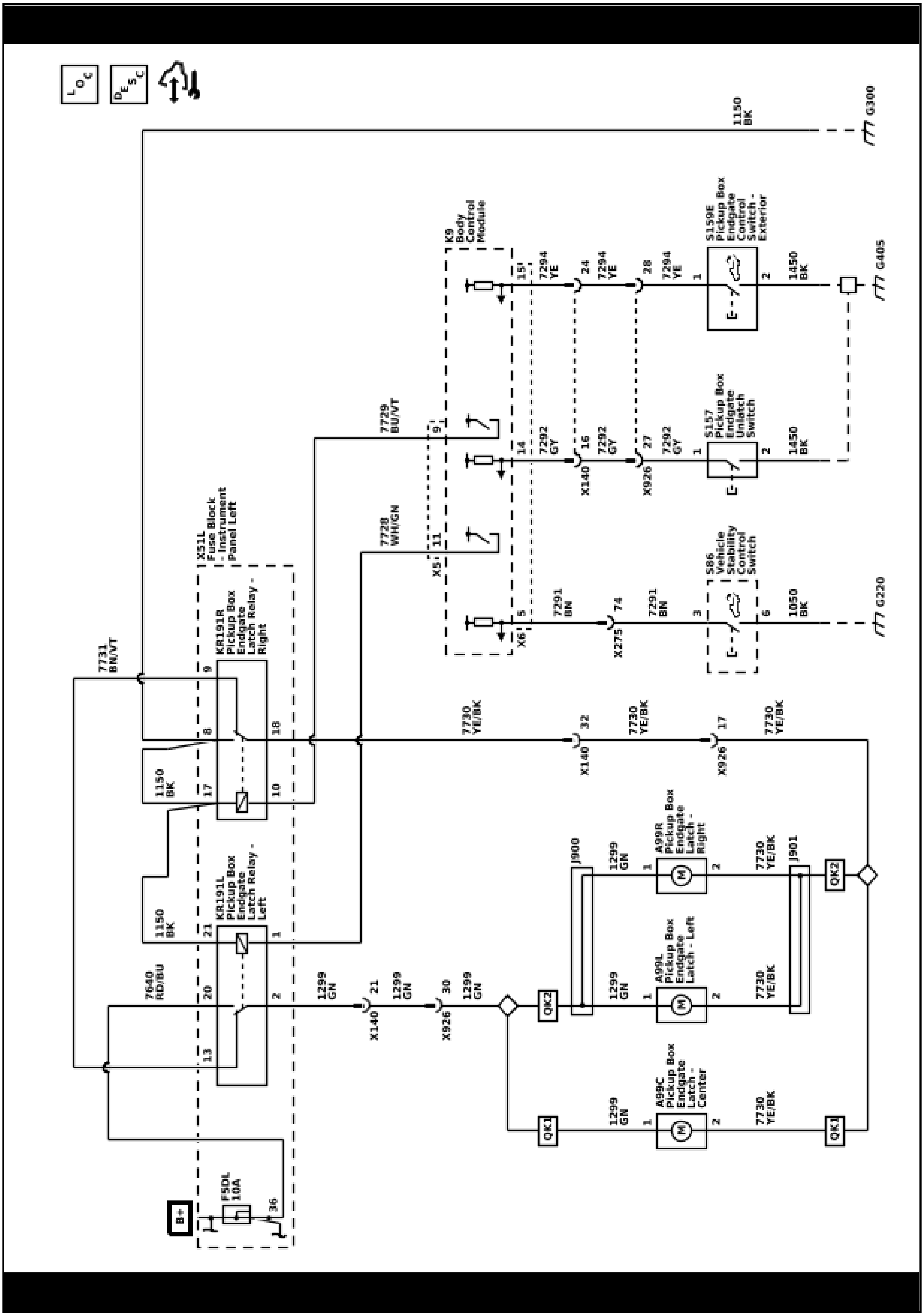
3571 VT/WH
6157 BN/YE
6158 YE/GY
X500 20
X600 20
X700 6
X800 6
3570 GN/WH
3571 VT/WH
6157 PK
6158 YE/GY
1
1
1
1
B27D Door Handle Switch - Driver Exterior
A24D Door Handle Assembly - Driver Exterior
B27P Door Handle Switch - Passenger Exterior
A24P Door Handle Assembly - Passenger Exterior
B27LR Door Handle Switch - Left Rear Exterior
A24LR Door Handle Assembly - Left Rear Exterior
B27RR Door Handle Switch - Right Rear Exterior
A24RR Door Handle Assembly - Right Rear Exterior
5
5
5
5
1150 BK
1250 BK
1150 BK
1250 BK
G300
G320

5502033

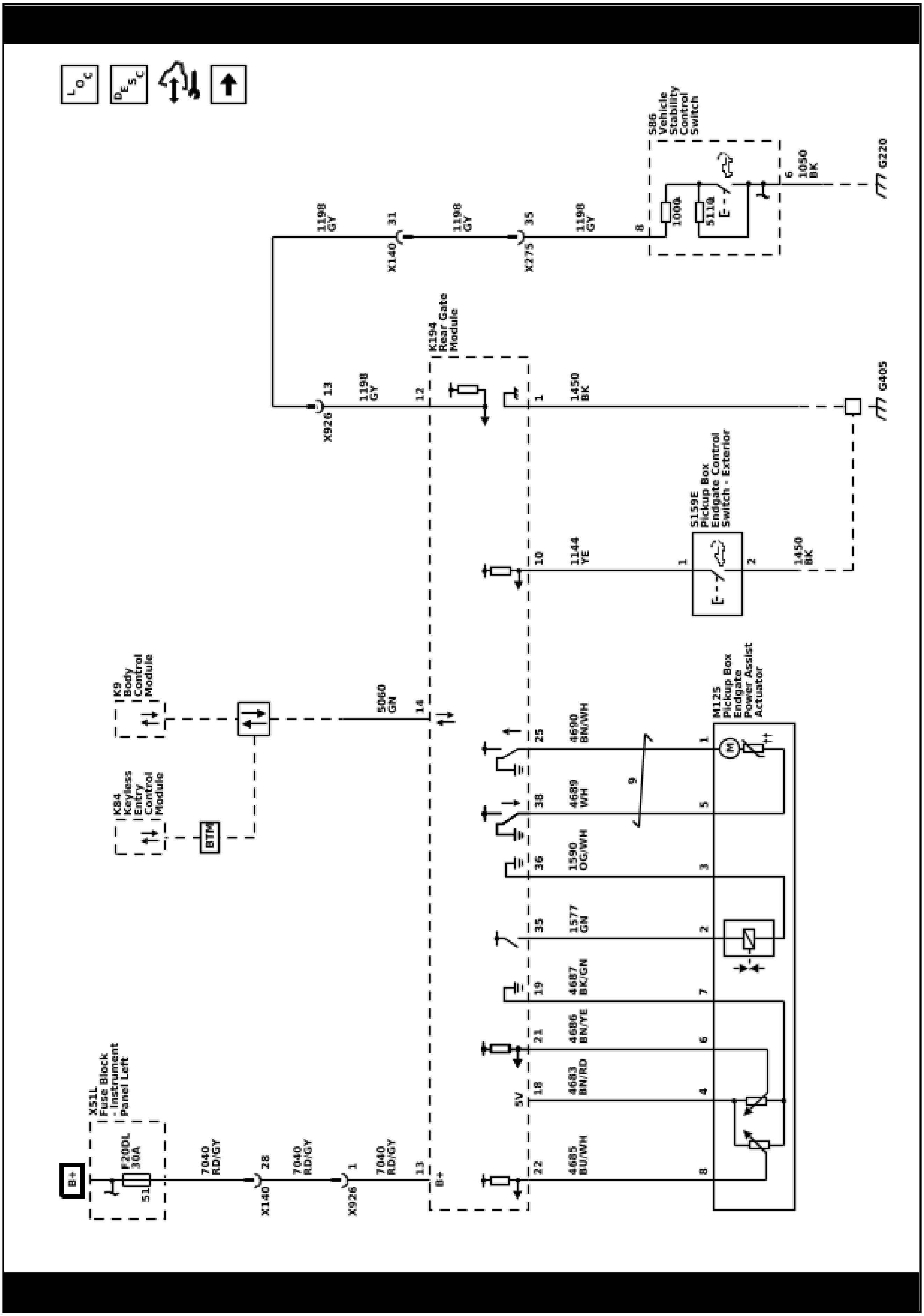
Release Systems Schematics (Endgate Release (QT5))



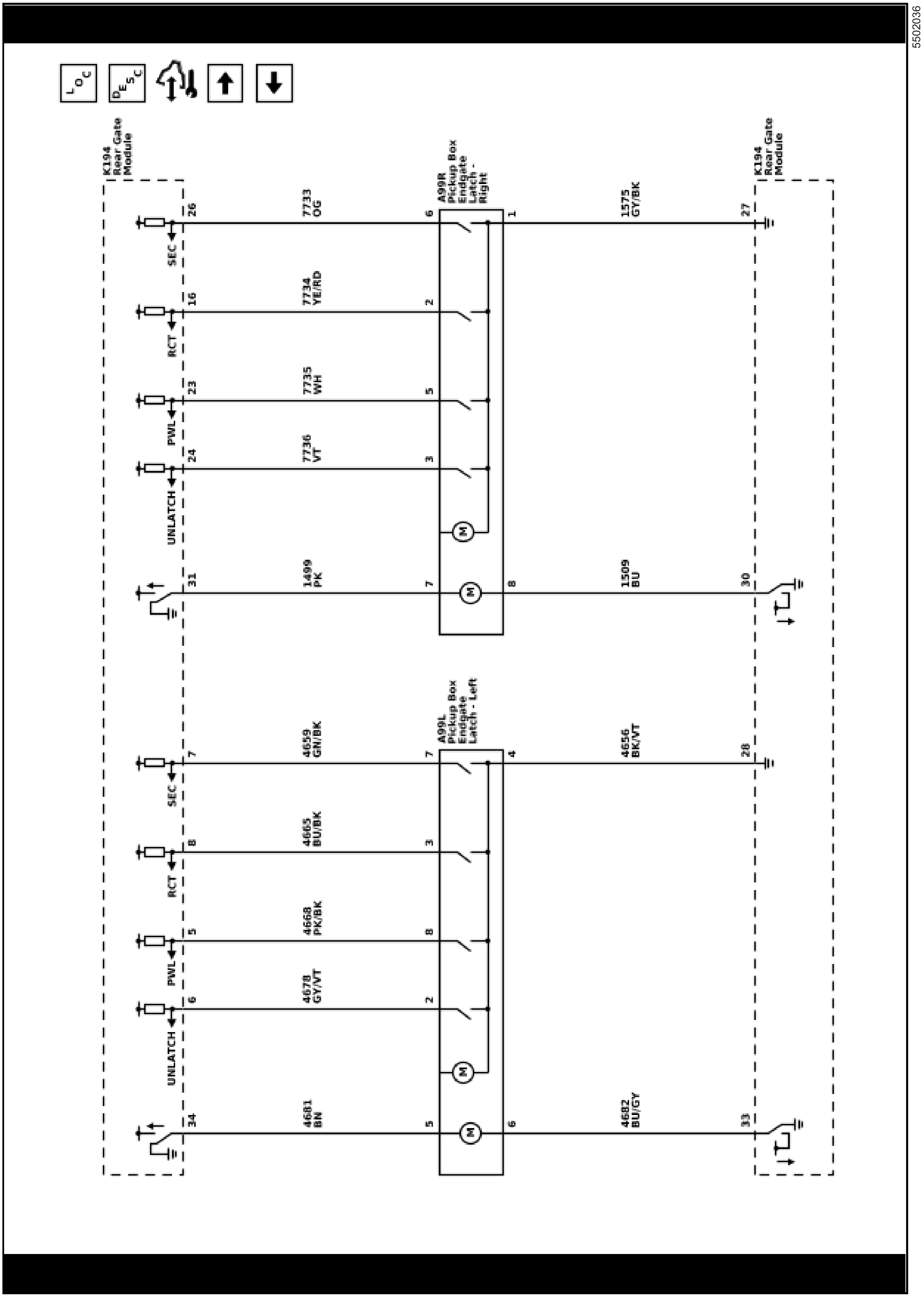
B+
F5DL 10A
36
X51L Fuse Block - Instrument Panel Left
KR191L Pickup Box Endgate Latch Relay - Left
KR191R Pickup Box Endgate Latch Relay - Right
7640 RD/BU
7731 BN/VT
1150 BK
13
20
21
2
1
9
8
17
18
10
1299 GN
X140 21
X926 30
QK1
QK2
J900
J901
A99C Pickup Box Endgate Latch - Center
A99L Pickup Box Endgate Latch - Left
A99R Pickup Box Endgate Latch - Right
7730 YE/BK
X140 32
X926 17
7728 WH/GN
7729 BU/VT
K9 Body Control Module
X5 11
9
X6 5
14
15
7291 BN
X275 74
7292 GY
X140 16
X926 27
7294 YE
24
28
S86 Vehicle Stability Control Switch
S157 Pickup Box Endgate Unlatch Switch
S159E Pickup Box Endgate Control Switch - Exterior
3
6
1
2
1050 BK
1450 BK
G220
G405
G300
L O C
D E S C

5502034

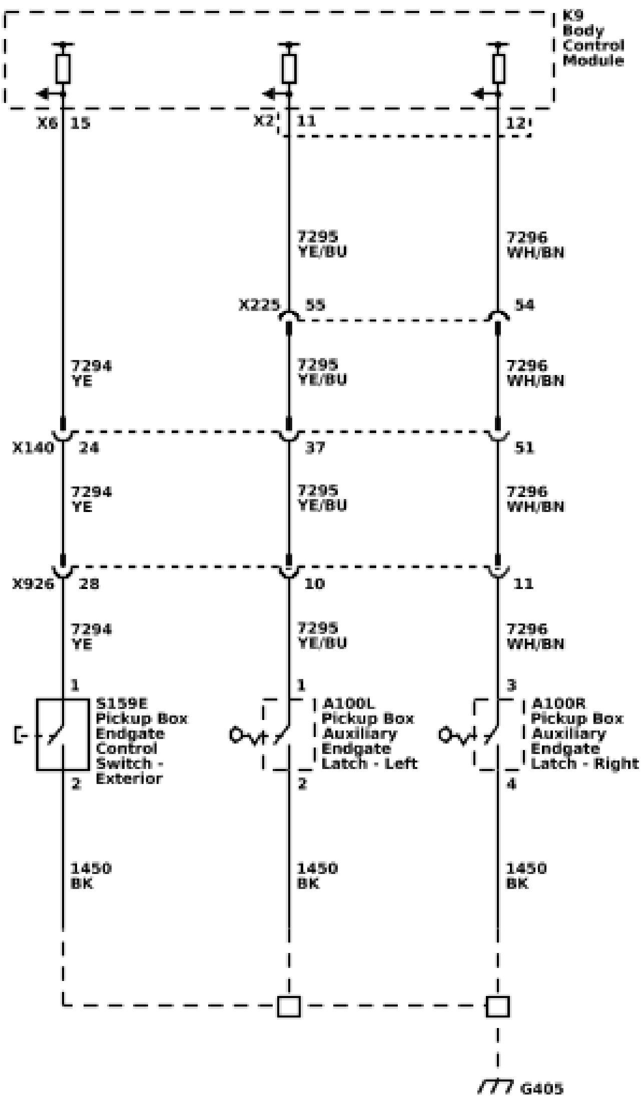
Endgate Schematics (Power Endgate Controls (QT6))


5502035
LOC
DESC
B+
F20DL
30A
51
X51L
Fuse Block
- Instrument
Panel Left
7040
RD/GY
X140
28
X926
1
13
B+
K194
Rear Gate
Module
22
4685
BU/WH
18
5V
4683
BN/RD
21
4686
BN/YE
19
4687
BK/GN
35
1577
GN
36
1590
OG/WH
38
4689
WH
25
4690
BN/WH
9
14
5060
GN
K9
Body
Control
Module
K84
Keyless
Entry
Control
Module
BTM
10
1144
YE
12
1198
GY
1
1450
BK
M125
Pickup Box
Endgate
Power Assist
Actuator
8
4
6
7
2
3
5
1
M
S159E
Pickup Box
Endgate Control
Switch - Exterior
1
2
1450
BK
G405
X926
13
1198
GY
X140
31
1198
GY
X275
35
1198
GY
8
100Ω
510Ω
6
1050
BK
G220
S86
Vehicle
Stability
Control
Switch

Endgate Schematics (Power Endgate Latches (QT6))

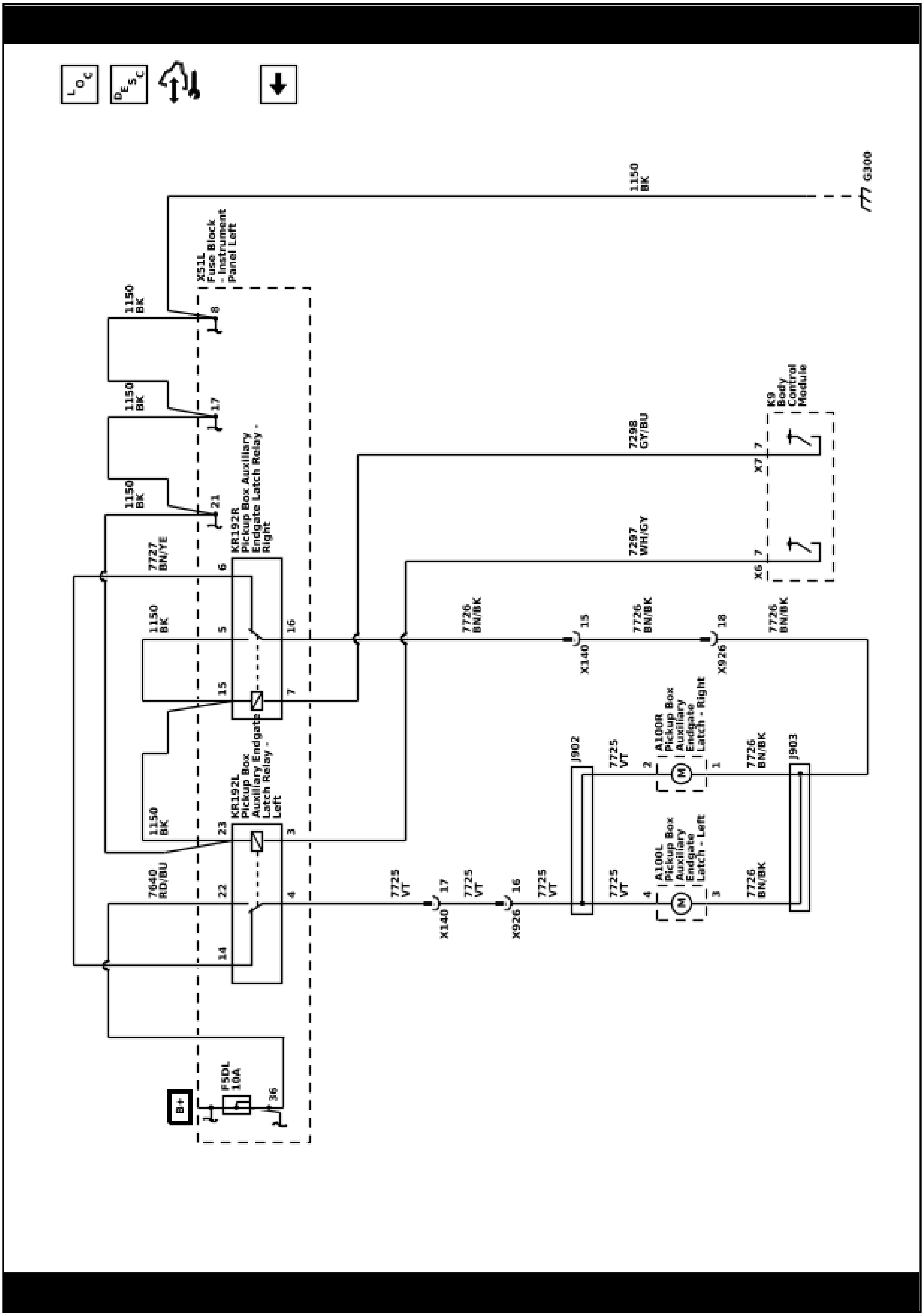

5502036
L O C
D E S C
K194 Rear Gate Module
A99R Pickup Box Endgate Latch - Right
A99L Pickup Box Endgate Latch - Left
SEC
RCT
PWL
UNLATCH
26
7733 OG
6
1
1575 GY/BK
27
16
7734 YE/RD
2
23
7735 WH
5
24
7736 VT
3
31
1499 PK
7
M
8
1509 BU
30
7
4659 GN/BK
7
4
4656 BK/VT
28
8
4665 BU/BK
3
5
4668 PK/BK
8
6
4678 GY/VT
2
34
4681 BN
5
6
4682 BU/GY
33

Endgate Schematics (Auxiliary Endgate Latch Controls and Switches (QK2))

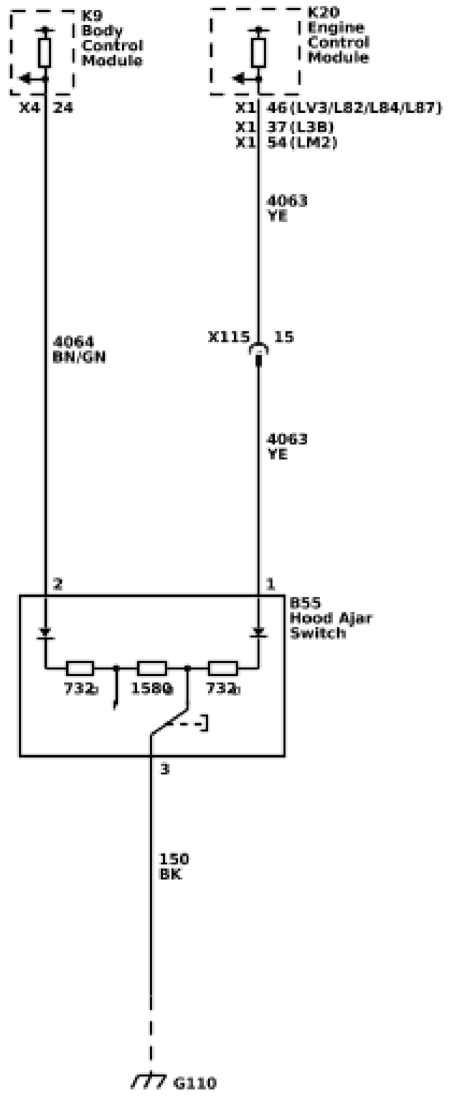

K9
Body
Control
Module
X6 15
X2 11
12
7295
YE/BU
7296
WH/BN
X225 55
54
7294
YE
7295
YE/BU
7296
WH/BN
X140 24
37
51
7294
YE
7295
YE/BU
7296
WH/BN
X926 28
10
11
7294
YE
7295
YE/BU
7296
WH/BN
1
1
3
S159E
Pickup Box
Endgate
Control
Switch -
Exterior
A100L
Pickup Box
Auxiliary
Endgate
Latch - Left
A100R
Pickup Box
Auxiliary
Endgate
Latch - Right
2
2
4
1450
BK
1450
BK
1450
BK
G405

5502037

Endgate Schematics (Auxiliary Endgate Latch Motors (QK2))


5502038
B+
F5DL
10A
36
X51L
Fuse Block
- Instrument
Panel Left
8
17
21
1150
BK
KR192R
Pickup Box Auxiliary
Endgate Latch Relay -
Right
6
5
15
16
7
7727
BN/YE
KR192L
Pickup Box
Auxiliary Endgate
Latch Relay -
Left
23
22
14
3
4
7640
RD/BU
7725
VT
X140
17
X926
16
J902
A100L
Pickup Box
Auxiliary
Endgate
Latch - Left
M
7726
BN/BK
J903
A100R
Pickup Box
Auxiliary
Endgate
Latch - Right
2
1
X140
15
X926
18
7297
WH/GY
7298
GY/BU
X6
X7
K9
Body
Control
Module
G300

Hood Latch Schematics (Hood Ajar Switch)


K9
Body
Control
Module
X4 24
K20
Engine
Control
Module
X1 46 (LV3/L82/L84/L87)
X1 37 (L3B)
X1 54 (LM2)
4063
YE
4064
BN/GN
X115 15
4063
YE
2
1
B55
Hood Ajar
Switch
732Ω
1580Ω
732Ω
3
150
BK
G110

5501966

Description and Operation

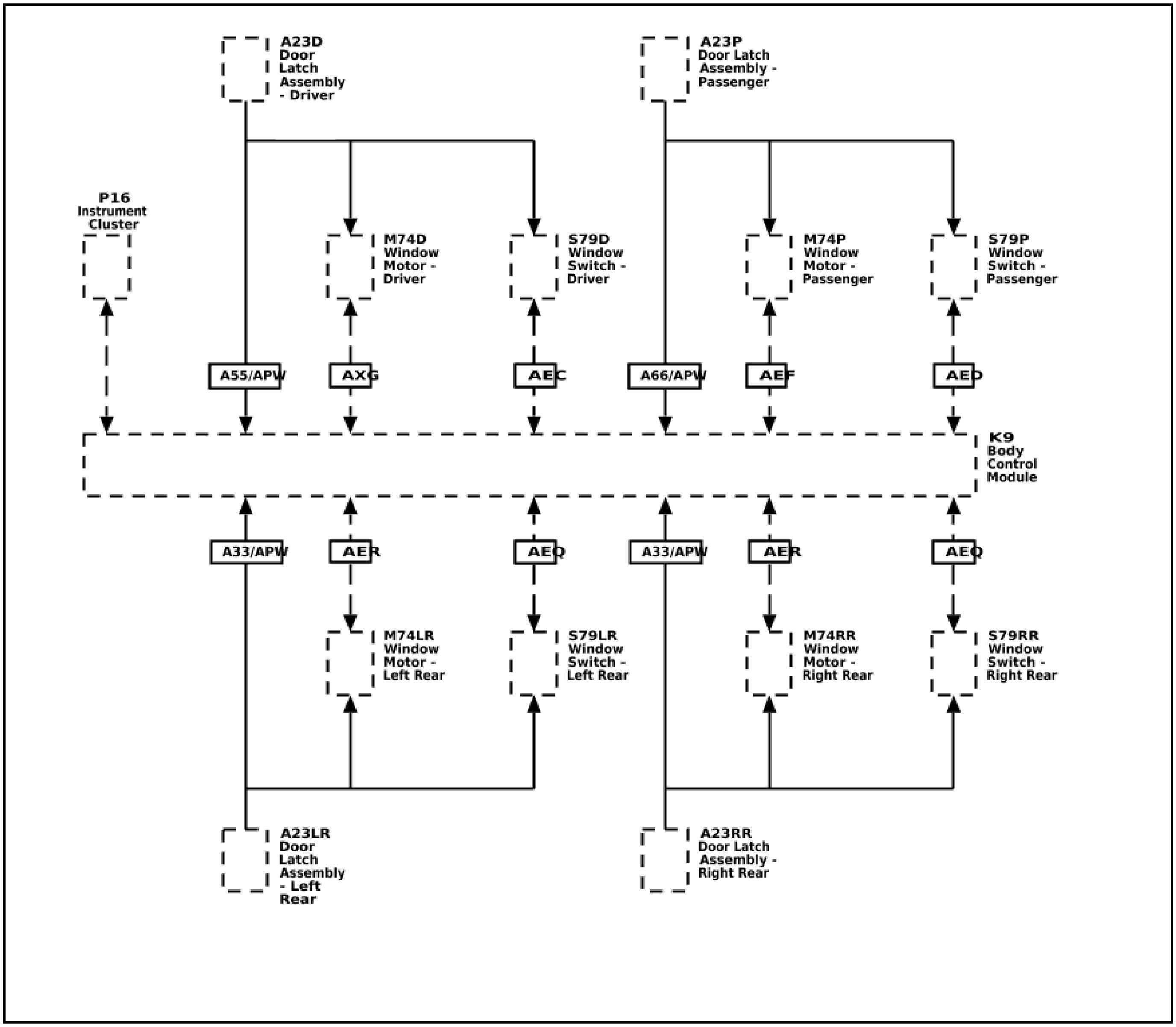
Door Ajar Indicator Description and Operation

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- Body control module
- Instrument cluster
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Driver window motor (AXG)
- Driver window switch (AEC)
- Passenger window motor (AEF)
- Passenger window switch (AED)
- Left rear window motor (AER)
- Left rear window switch (AEQ)
- Right rear window motor (AER)
- Right rear window switch (AEQ)

Door Ajar Indicator Block Diagram


A23D Door Latch Assembly - Driver
A23P Door Latch Assembly - Passenger
P16 Instrument Cluster
M74D Window Motor - Driver
S79D Window Switch - Driver
M74P Window Motor - Passenger
S79P Window Switch - Passenger
A55/APW
AXG
AEC
A66/APW
AEF
AED
K9 Body Control Module
A33/APW
AER
AEQ
A33/APW
AER
AEQ
M74LR Window Motor - Left Rear
S79LR Window Switch - Left Rear
M74RR Window Motor - Right Rear
S79RR Window Switch - Right Rear
A23LR Door Latch Assembly - Left Rear
A23RR Door Latch Assembly - Right Rear

3556440

Door Ajar System

Depending upon if the vehicle is equipped with express up/down power windows, express down only power windows, power windows without any express functions or manual crank windows affects how the driver and passenger door ajar signal circuits are configured and monitored.

Driver, Passenger and Rear Door Ajar (AXG, AEF and AER)

The window motors provide a 12V signal to the respective door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The window motor will detect the voltage drop in the ajar signal circuit and will send a serial data message to the body control module. The body control module will then send a message to the instrument cluster which will illuminate the door ajar icon.

Driver, Passenger and Rear Doors Ajar (AEC, AED and AEQ)

The driver, passenger and rear window switches provide a 12V signal to the respective door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The window switch will detect the voltage drop in the ajar signal circuit and will send a serial data message to the body control module. The body control module will then send a message to the instrument cluster which will illuminate the door ajar icon.

Driver, Passenger and Rear Doors Ajar (A55, A66, A33 or Manual Crank Windows)

The body control module provides a 12V signal to each door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The body control module will detect the voltage drop in the ajar signal circuit and will send a message to the instrument cluster which will illuminate the door ajar icon

Endgate Description and Operation (QT6)

System Description

The power endgate system consists of the following components:

- Rear gate module
- Pickup box endgate power assist actuator
- Pickup box endgate position sensor (part of the power assist actuator)
- Interior pickup box endgate control switch (Part of the Instrument panel multifunction switch)
- Exterior pickup box endgate control switch
- Right pickup box endgate latch assembly
- Left pickup box endgate latch assembly
- Keyless entry transmitter
- Remote control door lock receiver

Operation

The power endgate can be commanded to power open and power close by the following methods:

- An open or close command from the interior pickup box endgate control switch
- An open or close command from the exterior pickup box endgate control switch
- An open or close request by a signal from the keyless entry transmitter to the remote control door lock receiver

The rear gate module will respond to a request by commanding the left and right pickup box endgate latches to release the endgate and activate the pickup box endgate power assist actuator and lower the endgate or to raise and cinch the endgate closed.

Power Latch

The rear gate module continuously monitors power endgate operation and calculates its location and direction of travel from an endgate position sensor (part of the power assist actuator). One input returns the position of the endgate relative to the x-axis and y-axis. The rear gate module then uses these 2 inputs together to calculate its angle relative to the endgate.

The left and right pickup box endgate latches are bi-directional motors and latch or unlatch operation is the result of the direction of the motor rotation. The rear gate module controls the left and right pickup box endgate latches through the control circuits by supplying power and ground in the appropriate polarity. The motor control circuits are monitored by the rear gate module prior to activation for a high or low condition and during motor operation for an insufficient current flow condition. The ratchet, pawl, and sector switches are part of the left and right pickup box endgate latches and are used by the rear gate module to determine the state of the latch during the process of latching or unlatching. Each of the latch switch signal circuits are supplied battery voltage and monitored within the rear gate module. The latch switches share a common low reference circuit from the rear gate module and when the switch contacts close the signal circuit goes low and the rear gate module determines the switch to be active.

The exterior pickup box endgate control switch signal circuit is supplied battery voltage by the rear gate module. When the switch is pressed the contacts close and the signal circuit goes low, the rear gate module will detect the voltage drop and will command the endgate to release and lower or to power raise the endgate to the closed position.

For vehicles without the optional passive keyless entry, when the exterior pickup box endgate control switch is pressed, the rear gate module will check the status of the vehicle door locks by sending a serial data message to the body control module requesting the door lock status. If the vehicle doors are locked, the rear gate module will ignore the signal from the exterior pickup box endgate control switch. If the vehicle doors are unlocked, the rear gate module will permit the endgate to unlatch and power open when the exterior pickup box endgate control switch is pressed.

For vehicles with the optional passive keyless entry system, the keyless entry control module monitors the proximity of the keyless entry transmitter. If the exterior pickup box endgate control switch is pressed and the keyless entry transmitter is within range, the keyless entry control module will send a serial data message to the rear gate module indicating the presence of the keyless entry transmitter and the rear gate module will permit the endgate to unlatch and power open. If the doors are locked and the keyless entry transmitter is not within range, the rear gate module will ignore the signal from the exterior pickup box endgate control switch.

Manual Endgate Operation

The endgate can be manually closed from the full-open position when the endgate is lifted in a continuous motion. If the endgate motion is stopped between the full-open and half-closed positions, the lift to close feature can engage and power close the endgate. If the touch pad is pressed during power operation, the endgate will stop and allow manual operation. The endgate must be held after stopping, or it will continue to open

Tailgate Release Unavailable Driver Information Center Message

Power Endgate Functions Disabled Without Setting DTCs

The driver information center displays Tailgate Release Unavailable when a thermal inhibit occurs in the latch or drive unit or the position count is out of range.

The power endgate functions will be restored by performing the following actions:

- Closing the endgate which will reset the position counts
- Closing the endgate and removing the F20DL 30A fuse for greater than 5 minutes

Power Endgate Functions Disabled With DTCs Current

The driver information center displays Tailgate Release Unavailable when the rear gate module control module detects a malfunction in the power endgate system and the system is disabled.

Endgate Description and Operation (QT5 Without MultiPro Tailgate)

Endgate Release System Components

- Body control module (BCM)
- Pickup box endgate control switch-interior (Part of the instrument panel multifunction switch)
- Pickup box endgate control switch-exterior
- Pickup box endgate unlatch actuator
- Pickup box endgate unlatch relay

Endgate Release Operation (Without MutiPro Tailgate Option)

Interior Endgate Release Switch

The body control module monitors the voltage level of the endgate unlatch signal circuit so that when the switch is pressed contacts within the switch closes providing a ground path for the endgate unlatch signal circuit, the voltage within the signal circuit is pulled low, the body control module will detect the voltage drop and if the passenger doors are unlocked, will energize the pickup box endgate unlatch relay.

Exterior Endgate Release Switch

The body control module monitors the status of the vehicle doors, if the doors are locked the body control module will ignore the request from the exterior pickup box endgate control switch. If the passenger doors have been commanded to unlock, pressing the exterior pickup box endgate control switch will close contacts within the switch and provide a ground path for the endgate unlatch signal circuit, the body control module will detect the voltage drop and will energize the pickup box endgate unlatch relay.

If the vehicle has been equipped with the passive keyless entry system and the keyless entry transmitter is within 3 feet (1 meter) of the endgate, pressing the exterior pickup box endgate control switch will also function in the same manner but without unlocking the passenger doors. Refer to *Keyless Entry System Description and Operation on page 8-12* for more information on the passive keyless entry system.

Pickup Box Endgate Unlatch actuator

When body control module receives a endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the pickup box endgate unlatch relay control circuit, which energizes the coil side of the relay. The switch side of the pickup box endgate unlatch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the pickup box endgate unlatch actuator. The pickup box endgate unlatch actuator is continuously grounded and when it receives the voltage pulse, it will become energized and the latch will activate releasing the endgate so that it may be manually lowered to an open position.

Endgate Description and Operation (QT5 With MultiPro Tailgate)

Endgate Release System Components

- Body control module (BCM)
- Pickup box endgate control switch-interior (Part of the instrument panel multifunction switch)
- Pickup box endgate control switch-exterior
- Left pickup box endgate latch
- Right pickup box endgate latch
- Left pickup box auxiliary endgate latch
- Right pickup box auxiliary endgate latch
- Left pickup box endgate latch relay
- Right pickup box endgate latch relay
- Left pickup box auxiliary endgate latch relay
- Right pickup box auxiliary endgate latch relay

Endgate Release Operation (With MutiPro Tailgate Option)

Interior Endgate Release Switch

The body control module monitors the voltage level of the endgate unlatch signal circuit so that when the switch is pressed contacts within the switch closes providing a ground path for the endgate unlatch signal circuit, the voltage within the signal circuit is pulled low, the body control module will detect the voltage drop and if the passenger doors are unlocked, will energize the left pickup box endgate latch relay and right pickup box endgate latch relay.

Exterior Endgate Release Switch

The body control module monitors the status of the vehicle doors, if the doors are locked the body control module will ignore the request from the exterior pickup box endgate control switch. If the passenger doors have been commanded to unlock, pressing the appropriate exterior pickup box endgate control switch will close contacts within the switch and provide a ground path for the major or minor endgate unlatch signal circuit, the body control module will detect the voltage drop and will energize the appropriate pickup box endgate latch relays.

If the vehicle has been equipped with the passive keyless entry system and the keyless entry transmitter is within 3 feet (1 meter) of the endgate, pressing the exterior pickup box endgate control switch will also function in the same manner but without unlocking the passenger doors. Refer to *Keyless Entry System Description and Operation on page 8-12* for more information on the passive keyless entry system.

Major Pickup Box Endgate

Note: The auxiliary pickup box endgate must be in the latched position before commanding the major pickup box endgate to release. The body control module will disable the major pickup box endgate release function if the auxiliary pickup box endgate is open or ajar.

When body control module receives a major endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the left and right pickup box endgate latch relay control circuits, which energizes the coil side of the relays. The switch side of the left and right pickup box endgate latch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the left and right pickup box endgate latches. The left and right pickup box endgate latches will become energized and the latches will activate releasing the major endgate so that it may be manually lowered to an open position.

Minor Pickup Box Endgate

When body control module receives a major endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the left and right pickup box auxiliary endgate latch relay control circuits, which energizes the coil side of the relays. The switch side of the left and right pickup box auxiliary endgate latch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the left and right pickup box auxiliary endgate latches. The left and right pickup box auxiliary endgate latches will become energized and the latches will activate releasing the minor endgate so that it may be manually lowered to an open position.

Hood Ajar Indicator Description and Operation

Hood Ajar Switch

The body control module (BCM) applies B+ to the hood ajar signal circuit and monitors the voltage to determine the position of the hood. When the hood is closed, the switch is open and voltage remains high. When the hood is open, the switch is closed and the voltage is pulled low.

The BCM uses the hood ajar switch as a content theft deterrent alarm trigger.

Hood Ajar Indicator/Message

When the hood is ajar, a message is displayed on the DIC or the hood ajar indicator will be illuminated.

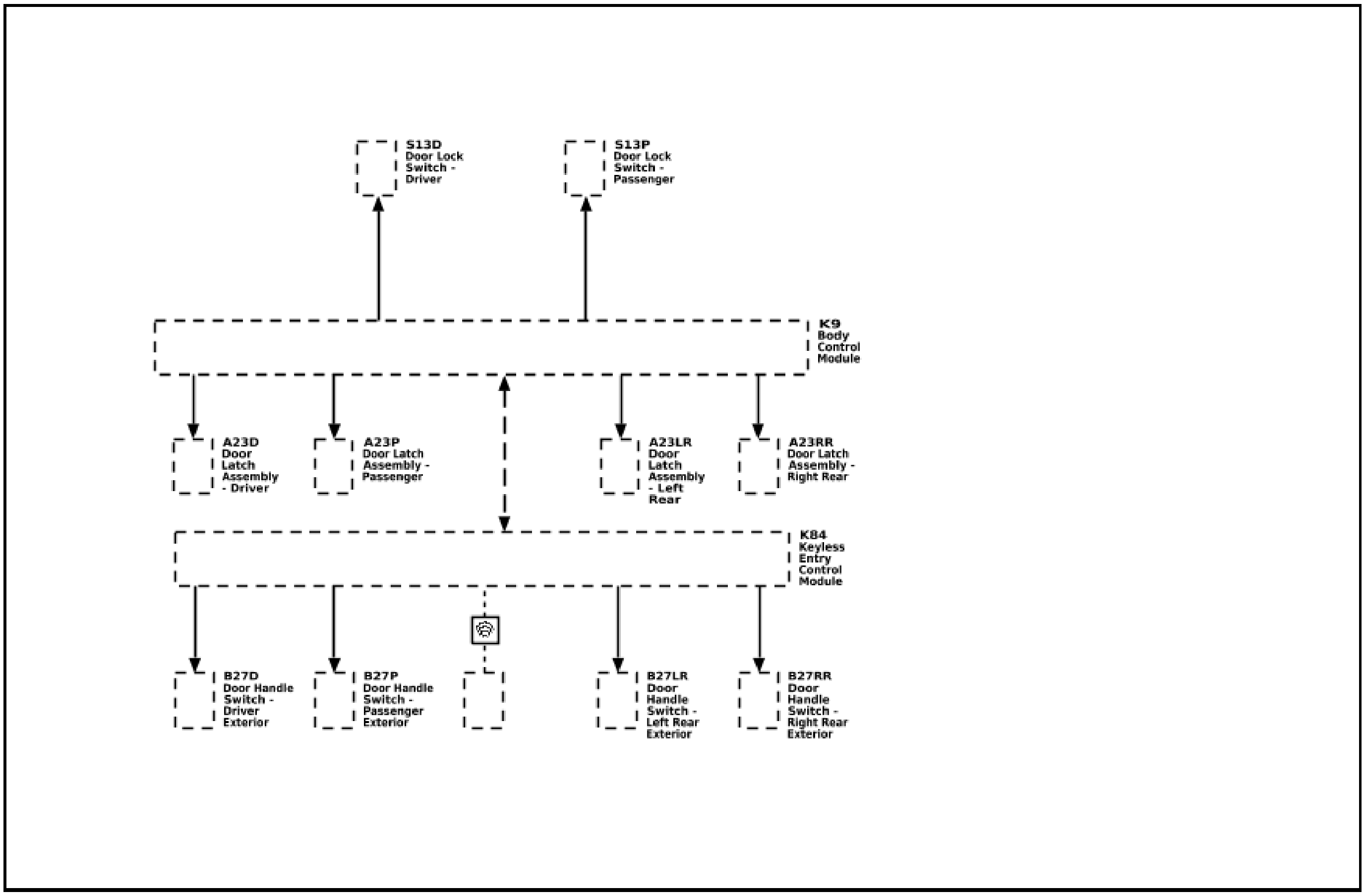
Power Door Locks Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Passenger door lock switch
- Key cylinder switch
- Body control module (BCM)
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Exterior door handle switches
- Keyless entry control module

Power Door Locks Block Diagram


S13D
Door Lock
Switch -
Driver
S13P
Door Lock
Switch -
Passenger
K9
Body
Control
Module
A23D
Door
Latch
Assembly
- Driver
A23P
Door Latch
Assembly -
Passenger
A23LR
Door
Latch
Assembly
- Left
Rear
A23RR
Door Latch
Assembly -
Right Rear
K84
Keyless
Entry
Control
Module
B27D
Door Handle
Switch -
Driver
Exterior
B27P
Door Handle
Switch -
Passenger
Exterior
B27LR
Door
Handle
Switch -
Left Rear
Exterior
B27RR
Door
Handle
Switch -
Right Rear
Exterior

3270435

Door Lock and Unlock Operation

When the driver or passenger door lock switch is activated in the lock or unlock position, the BCM will receive a ground signal on either the door lock switch lock or unlock signal circuits.

The BCM, upon receipt of a lock switch lock or unlock signal, will supply battery voltage to the door lock actuator lock or unlock control circuits. Since the opposite side of the lock actuator is connected to ground through the other lock actuator control circuit, the doors will then lock or unlock as commanded.

The following three circuits are used to operate the lock:

- Driver door unlock
- Passenger door unlock
- All door lock

The driver door lock actuator is isolated so it can be unlocked by itself using the keyless entry transmitter.

Key Cylinder Switch

The driver window switch monitors the voltage level of the driver door lock motor status signal circuit. When the key is inserted into the driver door key cylinder and turned to the Lock position, a switch within the driver door latch closes causing the voltage to drop within the driver door lock motor status signal circuit. The driver window switch will detect the drop in voltage and will send a serial data message to the BCM commanding all the doors to Lock.

The driver key cylinder switch is used by the customer for programming the keyless entry transmitters, The driver window/outside rearview mirror switch monitors the voltage level of the key switch unlock signal circuit and when it detects a reprogramming request, it will send a serial data message to the body control module.

Passive Door Lock/Unlock Operation

The exterior door handle switch signal circuits provide inputs to the keyless entry control module when the exterior door handle switches are activated. These inputs allow the keyless entry control module to detect a door lock or a door unlock request. The keyless entry control module provides a 12 V signal to each exterior door handle switch via the door handle switch signal circuits. When a door handle switch is pressed, the switch closes and the voltage signal within the signal circuit is pulled to ground. The keyless entry control module will detect the voltage drop and a low frequency antenna will transmit a challenge to the keyless entry transmitter. If the challenge is met, the keyless entry transmitter will respond and the keyless entry control module will send a serial data message to the body control module to command the door(s) to be locked or unlocked

BLANK

Section 3

Brakes

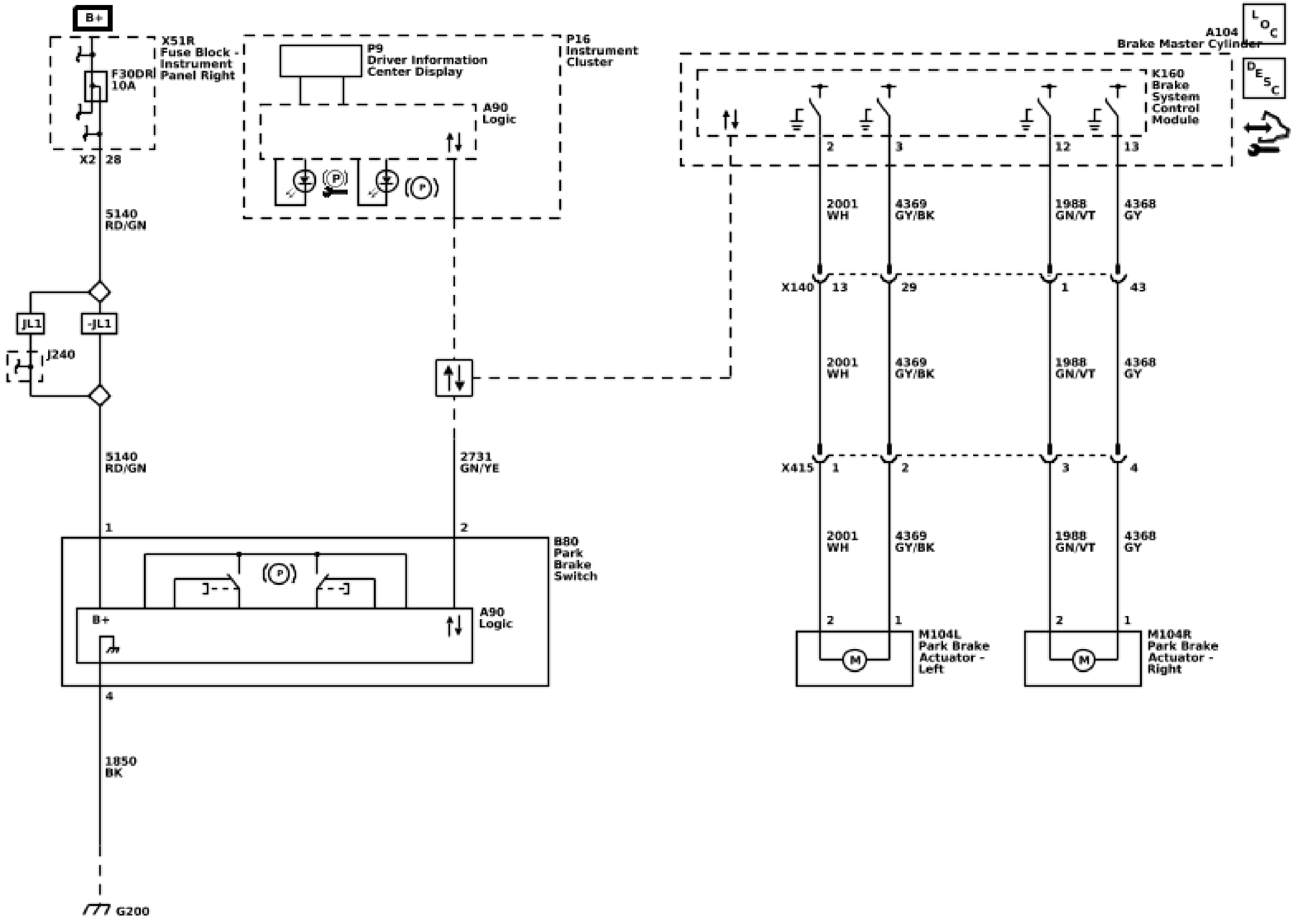
Park Brake 3-3
  Schematic and Routing Diagrams 3-3
    Park Brake System Schematics 3-4
  Description and Operation 3-5
    Electronic Parking Brake Description 3-5

BLANK

Park Brake

Schematic and Routing Diagrams

Park Brake System Schematics (Electric Park Brake)


B+
X51R
Fuse Block - Instrument Panel Right
F30DR
10A
X2 28
5140
RD/GN
JL1
-JL1
J240
5140
RD/GN
1
P9
Driver Information Center Display
P16
Instrument Cluster
A90
Logic
2731
GN/YE
2
B80
Park Brake Switch
A90
Logic
B+
4
1850
BK
G200
A104
Brake Master Cylinder
K160
Brake System Control Module
2
3
12
13
2001
WH
4369
GY/BK
1988
GN/VT
4368
GY
X140
13
29
1
43
X415
1
2
3
4
M104L
Park Brake Actuator - Left
M104R
Park Brake Actuator - Right
M

5502046

Description and Operation

Electronic Parking Brake Description

Vehicles with the electric parking brake have a switch in the center console or on the dash, which takes the place of the manual parking brake system, the foot pedal and release handle. In case of insufficient electrical power, the electric parking brake cannot be applied or released.

Electronic Brake Control Module/Brake System Control Module

The parking brake function is integrated into the Electronic Brake Control Module/Brake System Control Module. The module contains the logic for applying and releasing the parking brake when commanded by the Park Brake Switch.

When the Park Brake Switch is pulled, a signal is sent to the Electronic Brake Control Module which will supply 12 V to the apply control circuits and ground to the release control circuits which will cause the left and right park brake actuators to activate causing the park brakes to engage. When the Park Brake Switch is pressed, a signal is sent to the Electronic Brake Control Module which will supply 12 V to the released control circuits and ground to the apply control circuits which will cause the left and right park brake actuators to activate causing the park brakes to release. In some vehicles, the Park Brake Switch is a push-button style switch. When the switch is pressed, the park brakes are commanded to either apply or release based off of their current position.

The Electronic Brake Control Module/Brake System Control Module will diagnose the park brake motor circuits to verify that they are functioning properly. The park brake motor circuits are used to command actuator motor operation, which will apply and release the parking brake. These circuits are used to activate the actuator, which applies or releases pressure on the caliper pistons, ultimately applying and releasing the park brake.

The Park Brake Motor Position Sensor is an internal sensor to the park brake actuator, this sensor is used to monitor the park brake motor position.

Electric Parking Brake Apply

The electric parking brake can be applied any time the vehicle is stopped or in motion. The electric parking brake is applied by momentarily operating the park brake control switch. The red park brake light will momentarily flash while the parking brake is being applied. Once fully applied, the red park brake light will turn on. If the electric parking brake is applied while the vehicle is in motion, the vehicle will decelerate as long as the switch is being operated. If the switch is operated until the vehicle comes to a stop, the park brake will remain applied.

If the red park brake light is flashing, the electric parking brake is only partially applied or released, or there is a problem with the electric parking brake. A DIC message will display.

The vehicle may automatically apply the electric parking brake in some situations when the vehicle is not moving. This is normal, and is done to periodically check the correct operation of the electric parking brake system.

Electric Parking Brake Release

To release the electric parking brake, turn the ignition switch to the ON or RUN position, apply and hold the brake pedal, and push down momentarily on the park brake control switch. When the electric parking brake is released the red park brake light turns off.

Automatic Electric Parking Brake Release

The parking brake will automatically release if the vehicle is running, placed into gear, and an attempt is made to drive away. Avoid rapid acceleration when the parking brake is applied to preserve parking brake lining life.

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Section 4

Driver Information and Entertainment

Image Display Cameras 4-3
  Schematic and Routing Diagrams 4-3
    Image Display Camera Schematics 4-4
  Description and Operation 4-11
    Rearview Camera Full Display Mirror Description and Operation 4-11
    Rear Vision Camera Description and Operation (UVC) 4-11
    Rear Vision Camera Description and Operation (UVB) 4-11
    Surround Vision Camera Description and Operation (UV2) 4-11
    Surround Vision Camera Description and Operation (Trailer Vision System (UVI/UVN/UVS)) 4-13

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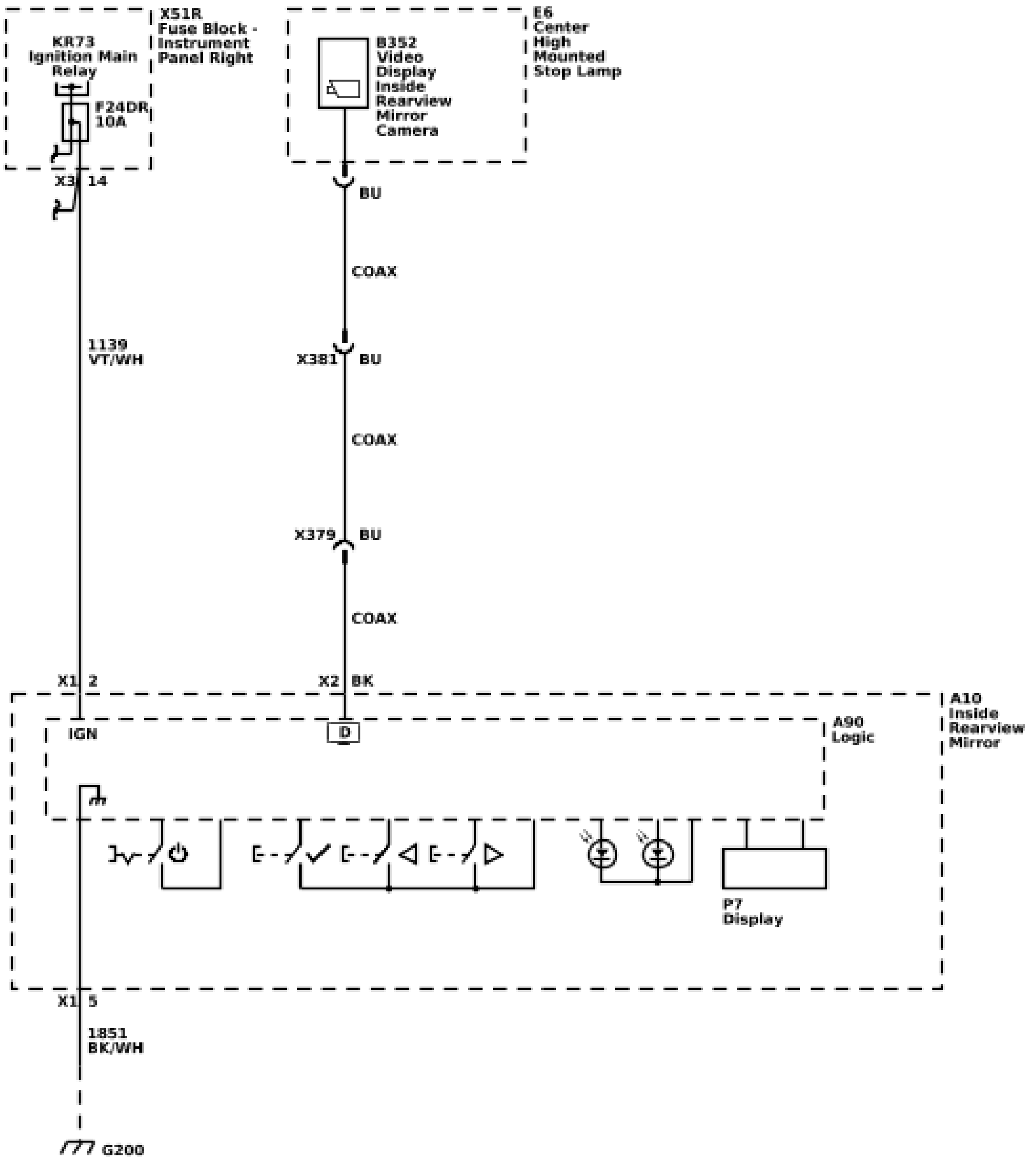
Image Display Cameras

Schematic and Routing Diagrams

Image Display Camera Schematics (Rearview Camera (DRZ))


X51R
Fuse Block - Instrument Panel Right
KR73
Ignition Main Relay
F24DR
10A
X3 14
1139
VT/WH
E6
Center High Mounted Stop Lamp
B352
Video Display Inside Rearview Mirror Camera
BU
COAX
X381
BU
COAX
X379
BU
COAX
X2 BK
X1 2
IGN
D
A90
Logic
A10
Inside Rearview Mirror
P7
Display
X1 5
1851
BK/WH
G200

5502072

Image Display Camera Schematics (Rearview Camera (UVC))

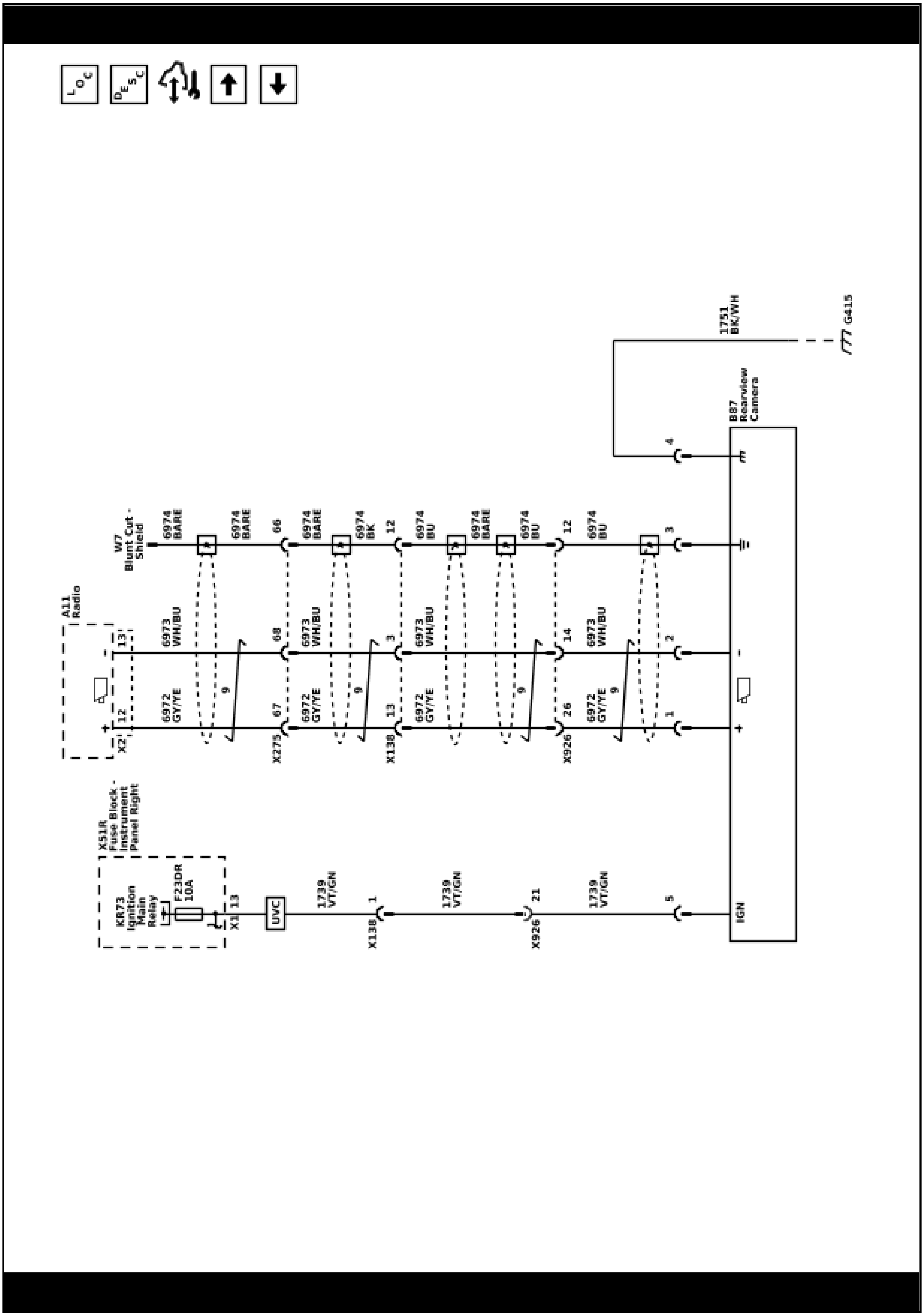

KR73
Ignition
Main
Relay
F23DR
10A
X1 13
X51R
Fuse Block -
Instrument
Panel Right
UVC
1739
VT/GN
X138 1
X926 21
5
IGN
A11
Radio
X2 12
13
+
-
6972
GY/YE
6973
WH/BU
W7
Blunt Cut -
Shield
6974
BARE
9
X275 67
68
66
6974
BK
X138 13
3
12
6974
BU
X926 26
14
12
1
2
3
4
B87
Rearview
Camera
1751
BK/WH
G415
5502073

Image Display Camera Schematics (Rearview Camera (UVB))

5502074

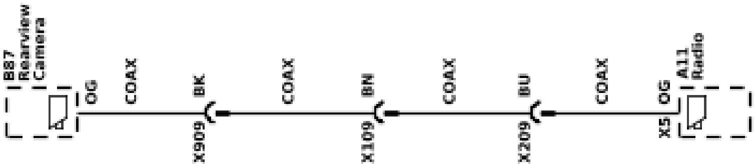

B87
Rearview
Camera
OG
COAX
BK
X909
COAX
BN
X109
COAX
BU
X209
COAX
OG
X5
A11
Radio

Image Display Camera Schematics (Rearview Camera (5N5))

5502075

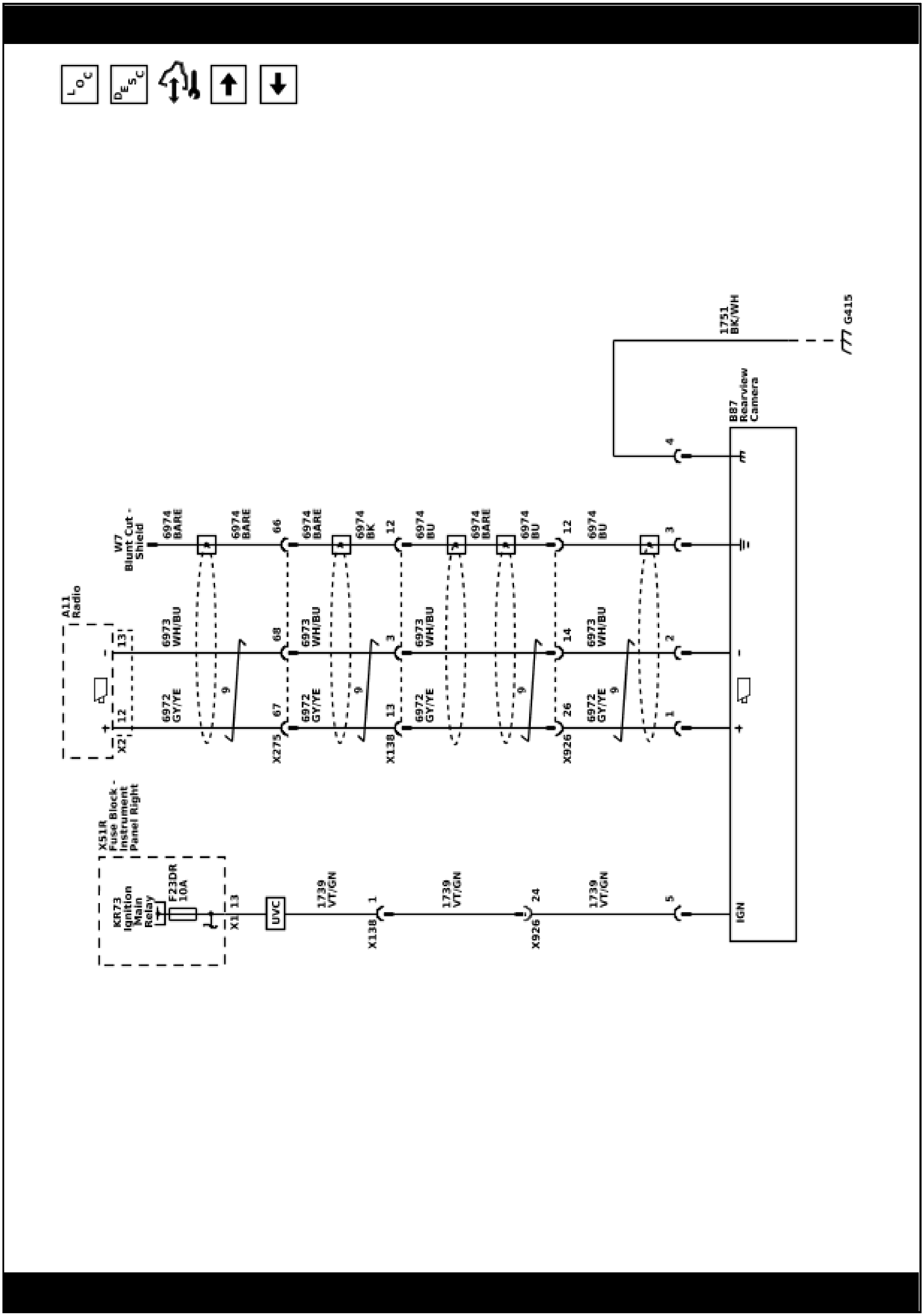

KR73 Ignition Main Relay
F23DR 10A
X51R Fuse Block - Instrument Panel Right
X1 13
UVC
1739 VT/GN
X138 1
1739 VT/GN
X926 24
1739 VT/GN
5
IGN
A11 Radio
X2 12 +
13 -
6972 GY/YE
6973 WH/BU
9
X275 67
68
6972 GY/YE
6973 WH/BU
9
X138 13
3
6972 GY/YE
6973 WH/BU
9
X926 26
14
6972 GY/YE
6973 WH/BU
9
1
2
+
-
W7 Blunt Cut - Shield
6974 BARE
6974 BARE
66
6974 BARE
6974 BK
12
6974 BU
6974 BARE
6974 BU
12
6974 BU
3
4
B87 Rearview Camera
1751 BK/WH
G415

Image Display Camera Schematics (270 Degree Vision (UVI-UVN))

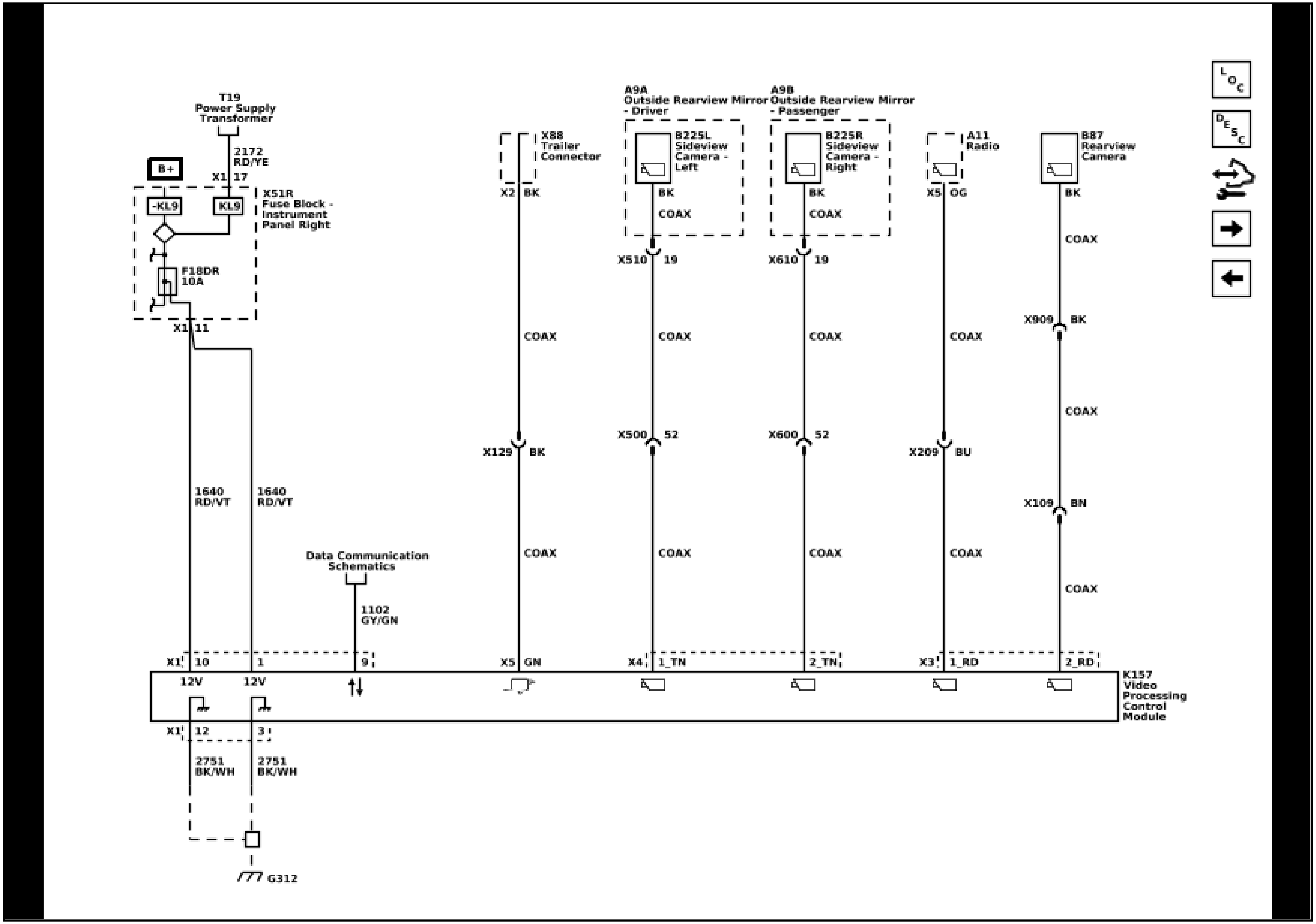

T19
Power Supply
Transformer
2172
RD/YE
X1 17
B+
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F18DR
10A
X1 11
1640
RD/VT
1640
RD/VT
Data Communication
Schematics
1102
GY/GN
X88
Trailer
Connector
X2 BK
COAX
X129 BK
COAX
X5 GN
A9A
Outside Rearview Mirror
- Driver
B225L
Sideview
Camera -
Left
BK
COAX
X510 19
COAX
X500 52
COAX
X4 1_TN
A9B
Outside Rearview Mirror
- Passenger
B225R
Sideview
Camera -
Right
BK
COAX
X610 19
COAX
X600 52
COAX
2_TN
A11
Radio
X5 OG
COAX
X209 BU
COAX
X3 1_RD
B87
Rearview
Camera
BK
COAX
X909 BK
COAX
X109 BN
COAX
2_RD
X1 10
1
9
12V
12V
K157
Video
Processing
Control
Module
X1 12
3
2751
BK/WH
2751
BK/WH
G312
LOC
DESC
5502076

Image Display Camera Schematics (270 Degree Vision (UVI+UVN))

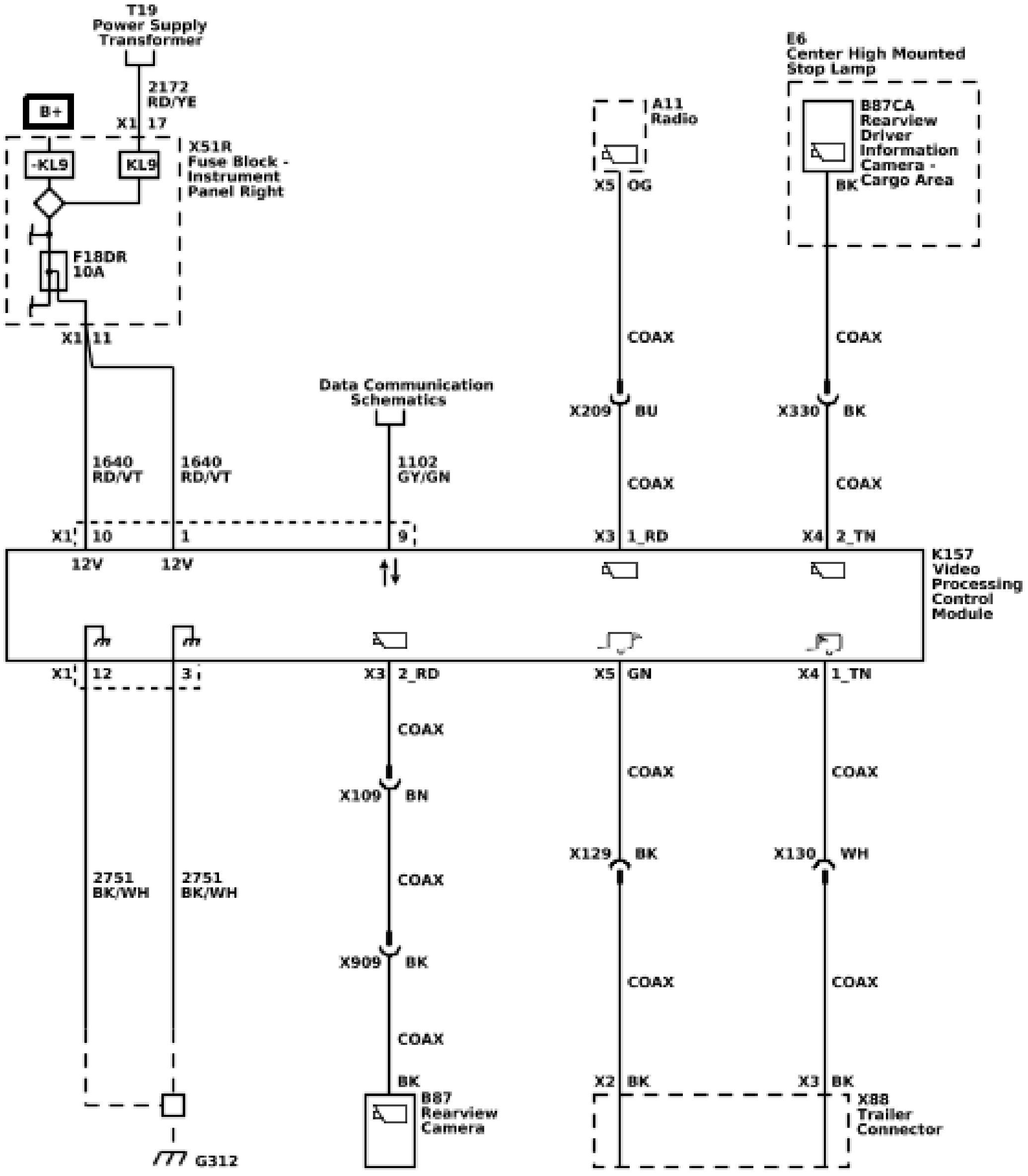

T19
Power Supply
Transformer
2172
RD/YE
X1 17
B+
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F18DR
10A
X1 11
1640
RD/VT
1640
RD/VT
X1 10
1
12V
12V
Data Communication
Schematics
1102
GY/GN
9
A11
Radio
X5 OG
COAX
X209 BU
COAX
X3 1_RD
E6
Center High Mounted
Stop Lamp
B87CA
Rearview
Driver
Information
Camera -
Cargo Area
BK
COAX
X330 BK
COAX
X4 2_TN
K157
Video
Processing
Control
Module
X1 12
3
X3 2_RD
X5 GN
X4 1_TN
2751
BK/WH
2751
BK/WH
G312
COAX
X109 BN
COAX
X909 BK
COAX
BK
B87
Rearview
Camera
COAX
X129 BK
COAX
X2 BK
COAX
X130 WH
COAX
X3 BK
X88
Trailer
Connector

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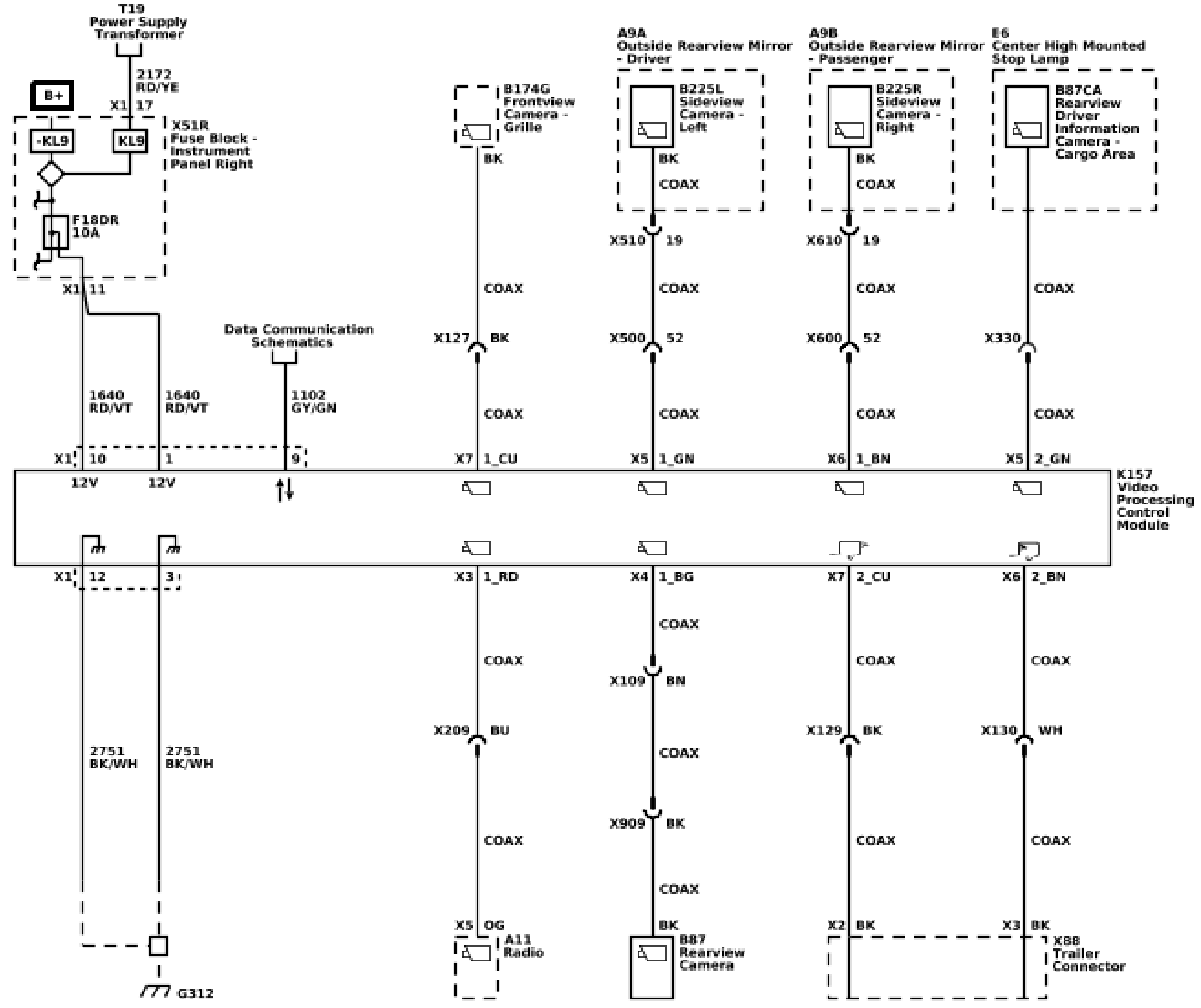
Image Display Camera Schematics (360 Degree Vision (UVS))


T19
Power Supply
Transformer
2172
RD/YE
B+
X1 17
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F18DR
10A
X1 11
1640
RD/VT
1640
RD/VT
Data Communication
Schematics
1102
GY/GN
X1 10
1
9
12V
12V
X1 12
3
2751
BK/WH
2751
BK/WH
G312
B174G
Frontview
Camera -
Grille
BK
COAX
X127 BK
COAX
X7 1_CU
X3 1_RD
COAX
X209 BU
COAX
X5 OG
A11
Radio
A9A
Outside Rearview Mirror
- Driver
B225L
Sideview
Camera -
Left
BK
COAX
X510 19
COAX
X500 52
COAX
X5 1_GN
X4 1_BG
COAX
X109 BN
COAX
X909 BK
COAX
BK
B87
Rearview
Camera
A9B
Outside Rearview Mirror
- Passenger
B225R
Sideview
Camera -
Right
BK
COAX
X610 19
COAX
X600 52
COAX
X6 1_BN
X7 2_CU
COAX
X129 BK
COAX
X2 BK
E6
Center High Mounted
Stop Lamp
B87CA
Rearview
Driver
Information
Camera -
Cargo Area
COAX
X330
COAX
X5 2_GN
X6 2_BN
COAX
X130 WH
COAX
X3 BK
X88
Trailer
Connector
K157
Video
Processing
Control
Module

5502077

Description and Operation

Rearview Camera Full Display Mirror Description and Operation

If equipped, full display mirror provides a wider field of view than normally seen from the inside rearview mirror to assist when driving and changing lanes. When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror. The inside rearview camera full display mirror is connected to the outside rearview camera via a shielded coaxial cable.

When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror.

Adjust the rearview mirror for a clear view of the area behind the vehicle before turning on full display mirror. Use the three buttons on the bottom of the mirror to adjust the brightness, zoom, and tilt of the display. Make sure the light sensor is not covered when adjusting the brightness.

The inside rearview camera full display mirror may not work properly or display a clear image if:.

- It is dark.
- The sun or the beam of headlamps are shining directly into the camera lens.
- Ice, snow, mud, or anything else builds up on the camera lens. Clean the lens, rinse it with water, and wipe it with a soft cloth.

When the mirror detects that the camera is not sending a valid video signal, it “blue screens” with a “no video” decal for 3 seconds, then reverts back to the mirror.

Rear Vision Camera Description and Operation (UVC)

Rear Vision Camera System Operation

The rear vision camera system consists of a video camera located at the rear of the vehicle and the Rado.

When the transmission is placed into REVERSE, a signal indicates to the Radio that the vehicle is in reverse and image display is requested. The rear vision camera receives ignition voltage and a constant ground to power the camera. Video signal + and video signal – circuits carry the video image from the rear vision camera to the radio. Additionally, the video signal circuits are shielded to prevent any interference which may lead to a loss of video signal resolution and a degraded video image. The shield is provided a ground path by the rear vision camera.

The following conditions may cause a degraded rear vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

If a malfunction is detected in the system, Service Rear Vision Camera may be displayed on the Info Display Module as an indicator to the customer that a problem exists that requires service.

Rear Vision Camera Description and Operation (UVB)

Rear Vision Camera System Operation

The rear vision camera system consists of a video camera located at the rear of the vehicle and the Rado.

When the transmission is placed into REVERSE, a signal is sent to the Radio indicating that camera operation is requested. The rearview camera sends video information to the radio through a coax cable. The coax cable also provides power from the Radio to the rearview camera.

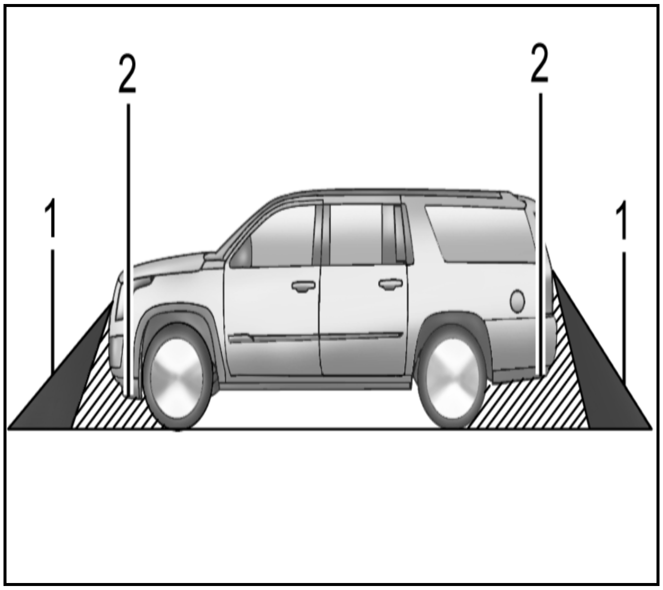
The following conditions may cause a degraded rear vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

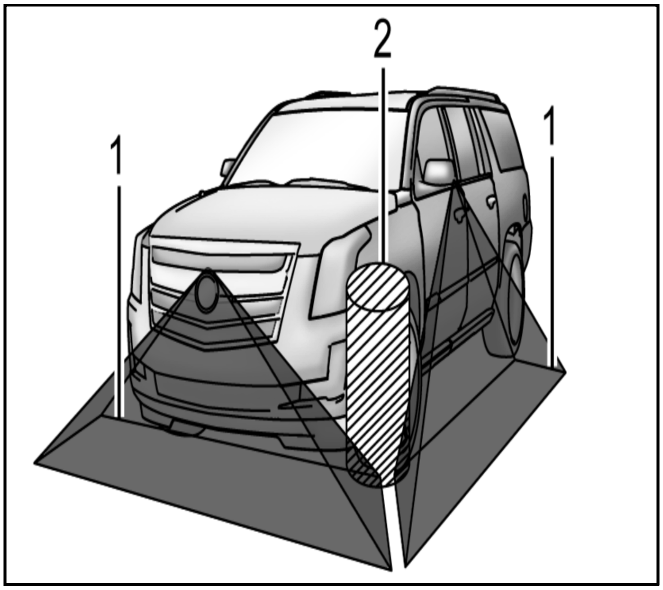
If a malfunction is detected in the system, Service Rear Vision Camera may be displayed on the Info Display Module as an indicator to the customer that a problem exists that requires service.

Surround Vision Camera Description and Operation (UV2)

Warning: The Surround Vision cameras have blind spots and will not display all objects near the corners of the vehicle. Folding outside mirrors that are out of position may not display surround view correctly. Always check around the vehicle when parking or backing.



1. View Displayed by the Surround Vision Camera
2. Area Not Shown



1. View Displayed by the Surround Vision Camera
2. Area Not Shown

The surround vision camera system consists of the following components:

- B87 Rearview Camera
- B174G Frontview Camera – Grille
- K157 Video Processing Control Module
- A11 Radio **OR** K74 Human Machine Interface Module
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right
- X20 Memory Card Receptacle (with XVR)

When the vehicle is traveling at speeds slower than 6 mph (10kph) the video processing control module will power up the cameras and send a video signal to the radio or human machine interface module.

The following conditions may cause a degraded surround vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

Surround Vision displays an overhead view of the area surrounding the vehicle, along with the front or rear camera views in the center stack. The front camera is in the grille or near the front emblem, the side cameras are on the bottom of the outside rearview mirrors, and the rear vision camera is above the license plate.

Note: Images from the Sideview Cameras are only displayed when both front doors are properly closed.

Features of the Surround Vision System

- Rear camera (B87 Rearview Camera) view alongside overhead view is displayed in reverse
- Front camera (B174G Frontview Camera – Grille) view alongside overhead view is displayed after shifting out of reverse to Neutral or Drive
- Will display front view when front park assist object is within trigger range calibration value (30 cm (12 in) in a forward gear
- Image is removed from display when vehicle speed exceeds speed calibration (10kph/6 mph) or button press / screen touch

System Operation

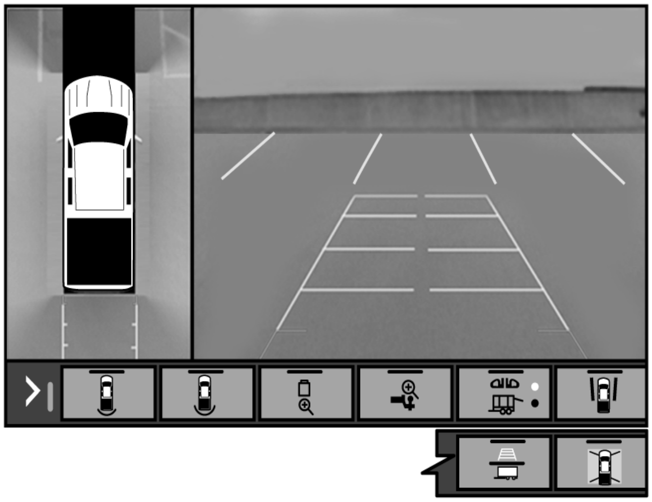
The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the processed image output to infotainment system via another coaxial cable.

The video processing control module receives CAN information from Rear Park Assist object detection module and Steering Wheel angle from body control module during Reverse. A warning triangle may display during the 360 surround view screen if Rear Parking Assist has detected an object during a reverse. This triangle changes from amber to red and increases in size the closer the object. Also a dynamic guideline is displayed in Reverse to show the projected path of the vehicle.

If equipped, the video processing control module system may have a memory card receptacle (with XVR) located in the trunk. The memory card receptacle interfaces with the video processing control module via a USB cable. The memory card receptacle also receives fused battery voltage and ground from the video processing control module. The video processing control module uses the memory card as a mass storage device, similar to a USB storage device.

Surround Vision Camera Description and Operation (Trailer Vision System (UVI/UVN/UVS))

Warning: The Surround Vision cameras have blind spots and will not display all objects near the corners of the vehicle. Folding outside mirrors that are out of position may not display surround view correctly. Always check around the vehicle when parking or backing.



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The Surround Vision- Trailer Vision camera systems consists of the following components:

UVI (4 channel)

- K157 Video Processing Control Module
- A11 Radio
- P17 Info Display Module
- B87 Rearview Camera
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right
- Trailer Camera (if customer installed)

UVI with UVN (4 channel)

- K157 Video Processing Control Module
- A11 Radio
- P17 Info Display Module
- B87 Rearview Camera
- B87CA Rearview Driver Information Camera-Cargo Area
- Trailer Rearview Camera (if customer installed)
- Trailer Interior Camera (if customer installed)

UVS with UVN (8 channel)

- K157 Video Processing Control Module
- A11 Radio
- P17 Info Display Module
- B87 Rearview Camera
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right
- B174G Frontview Camera – Grille
- B87CA Rearview Driver Information Camera-Cargo Area
- Trailer Rearview Camera (if customer installed)
- Trailer Interior Camera (if customer installed)

Features of the Surround Vision– Trailer Vision System

- Rear camera (B87 Rearview Camera) alongside overhead view is displayed in reverse
- Trailer Rearview Camera (if equipped) and Trailer Interior Camera (if equipped) view are displayed when selected via the Trailering application on the Infotainment screen. These cameras can also be configured to create a Transparent Trailer View when configured accordingly.
- Cargo Bed Camera view (if equipped) is displayed when selected via the Trailering application on the Infotainment screen.
- Image is removed from display when vehicle speed exceeds speed calibration (10kph/6 mph) or button press / screen touch
- Hitch View (when selected) displays a rear view camera image with a single guideline, which aids in aligning the truck to the trailer. If the driver shifts into PARK while in Hitch View, the parking brake is engaged to keep the vehicle from rocking when the driver gets out of the vehicle to hitch the trailer.
- Surround Vision displays an overhead view of the area surrounding the vehicle, along with the rear camera views in the center stack. The side cameras are on the bottom of the outside rearview mirrors, and the rear vision camera is above the license plate, and a rearview trailer camera can be mounted on the rear of a trailer.

  Note: Images from the Sideview Cameras are only displayed when both front doors are properly closed.

System Operation

The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the processed image output to infotainment system via another coaxial cable.

The video processing control module receives CAN information from Rear Park Assist object detection module and Steering Wheel angle from body control module during Reverse. A warning triangle may display during the surround view screen if Rear Parking Assist has detected an object during a reverse. This triangle changes from amber to red and increases in size the closer the object. Also a dynamic guideline is displayed in Reverse to show the projected path of the vehicle.

When the vehicle is traveling at speeds slower than 6 mph (10kph) the video processing control module will power up the cameras and send a video signal to the radio.

The following conditions may cause a degraded surround vision camera image:

- Ice, snow, or mud has built up on any camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Body damage to the vehicle
- Extreme high temperatures or extreme temperature changes

Section 5

Engine/Propulsion

12 V Starting and Charging 5-3
  Schematic and Routing Diagrams 5-3
    Starting and Charging Schematics 5-4
  Description and Operation 5-11
    Battery Description and Operation 5-11
    Charging System Description and Operation . . . 5-11
    Electrical Power Management Description and Operation 5-15
    Load Shed System Description and Operation 5-17
    Starting System Description and Operation 5-18
    Stop/Start System Description and Operation (KL9) 5-19

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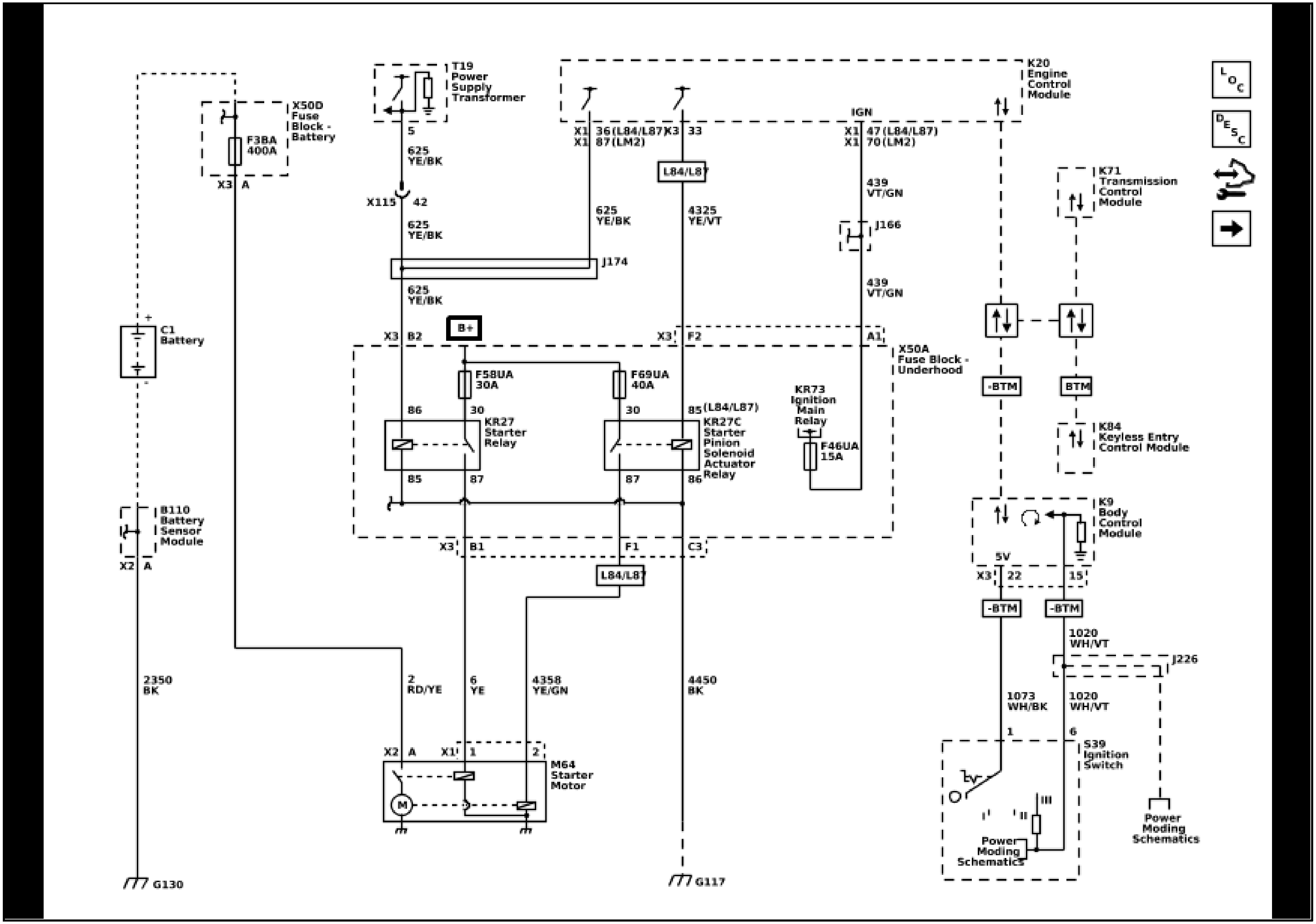
12 V Starting and Charging

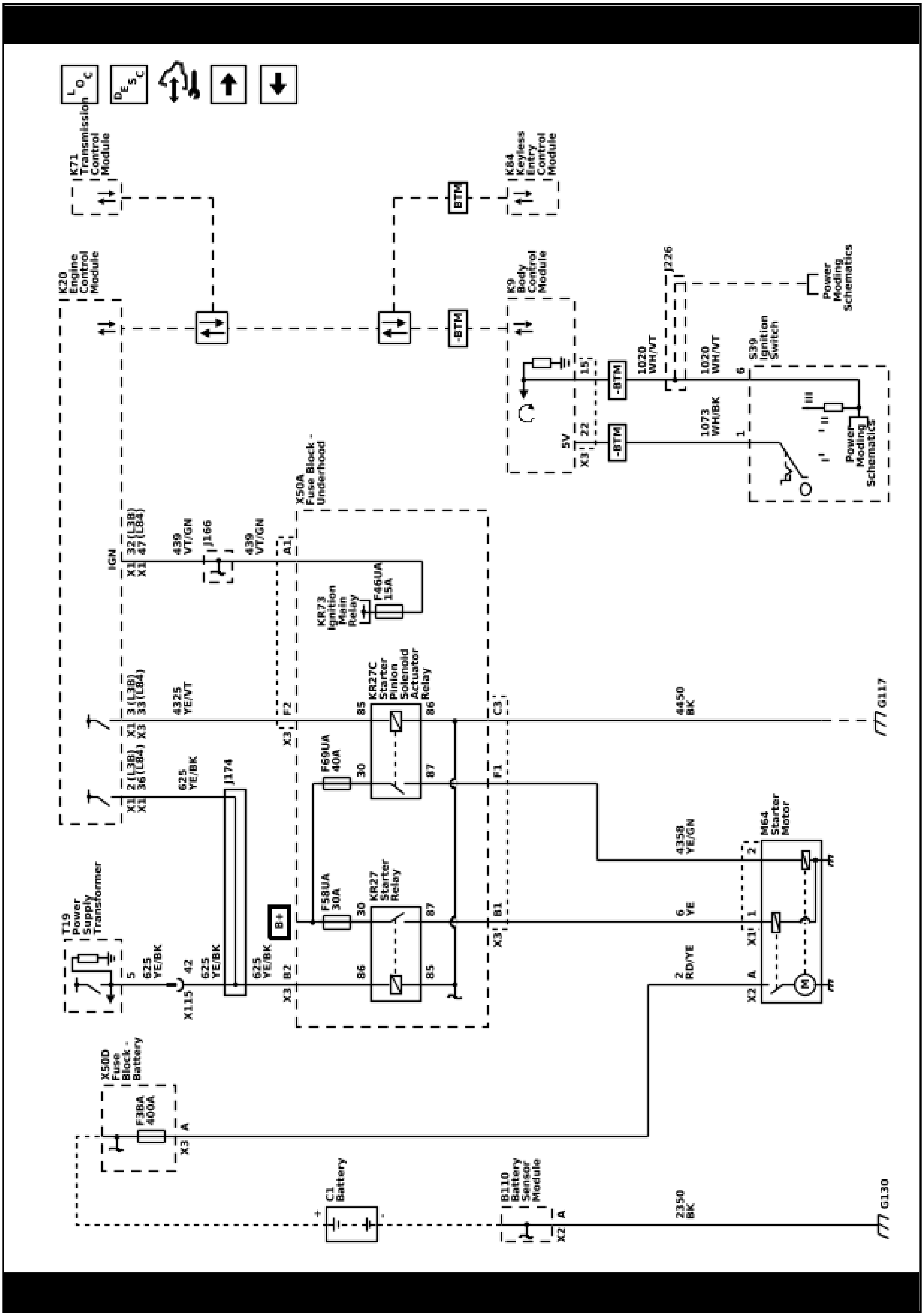
Schematic and Routing Diagrams

Starting and Charging Schematics (Starting (MQB))

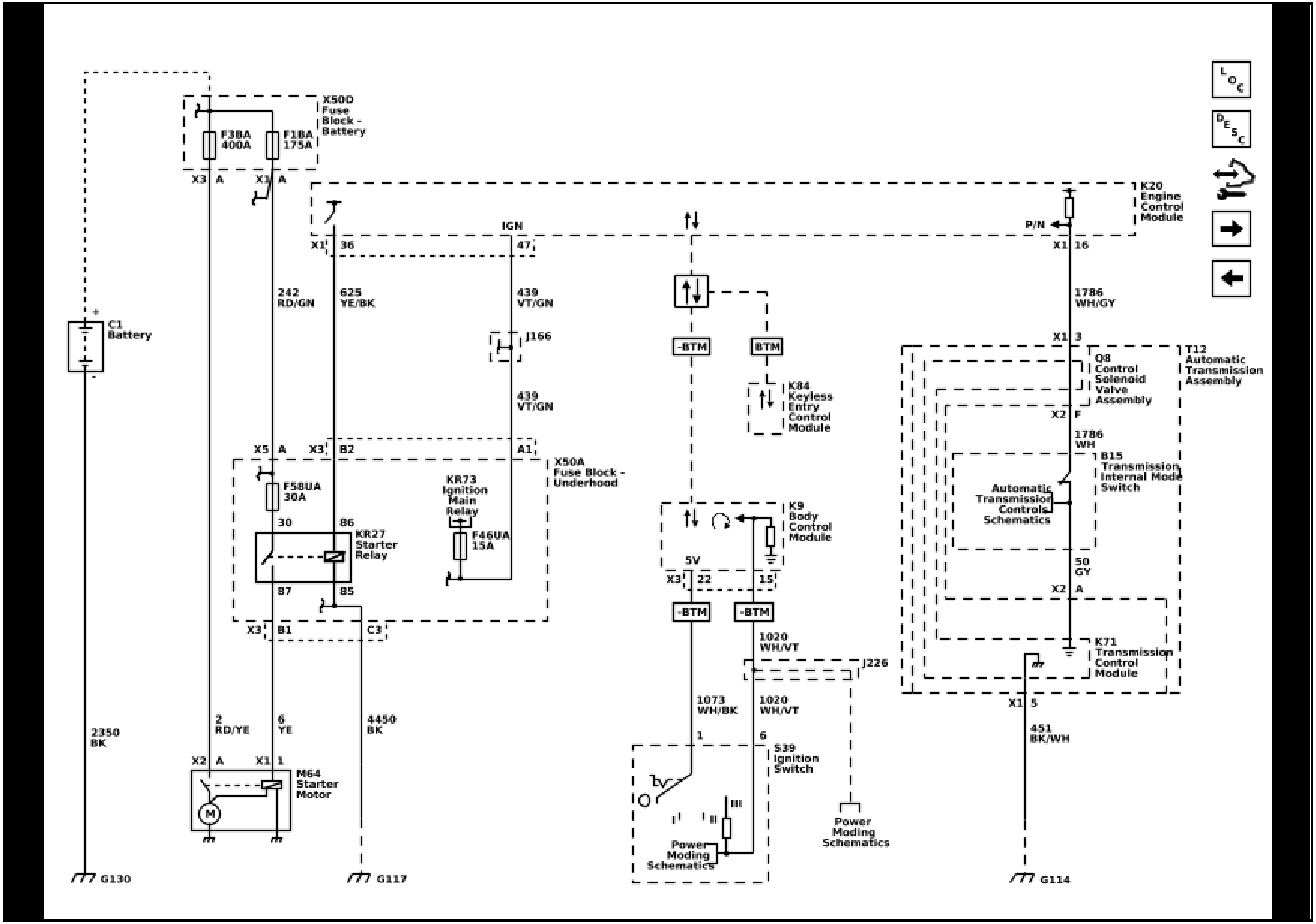


X50D Fuse Block - Battery
F3BA 400A
X3 A
C1 Battery
+
-
B110 Battery Sensor Module
X2 A
2350 BK
G130
T19 Power Supply Transformer
5
625 YE/BK
X115 42
625 YE/BK
J174
625 YE/BK
X3 B2
B+
X50A Fuse Block - Underhood
F58UA 30A
F69UA 40A
86
30
KR27 Starter Relay
85
87
30
85 (L84/L87)
KR27C Starter Pinion Solenoid Actuator Relay
87
86
KR73 Ignition Main Relay
F46UA 15A
X3 B1
F1
C3
L84/L87
2 RD/YE
6 YE
4358 YE/GN
X2 A
X1 1
2
M64 Starter Motor
M
K20 Engine Control Module
IGN
X1 36 (L84/L87)
X1 87 (LM2)
X3 33
X1 47 (L84/L87)
X1 70 (LM2)
L84/L87
625 YE/BK
4325 YE/VT
439 VT/GN
J166
439 VT/GN
X3 F2
A1
4450 BK
G117
K71 Transmission Control Module
-BTM
BTM
K84 Keyless Entry Control Module
K9 Body Control Module
5V
X3 22
15
-BTM
-BTM
1020 WH/VT
J226
1073 WH/BK
1020 WH/VT
1
6
S39 Ignition Switch
I
II
III
Power Moding Schematics
Power Moding Schematics
L O C
D E S C
5502080

Starting and Charging Schematics (Starting (MQE))

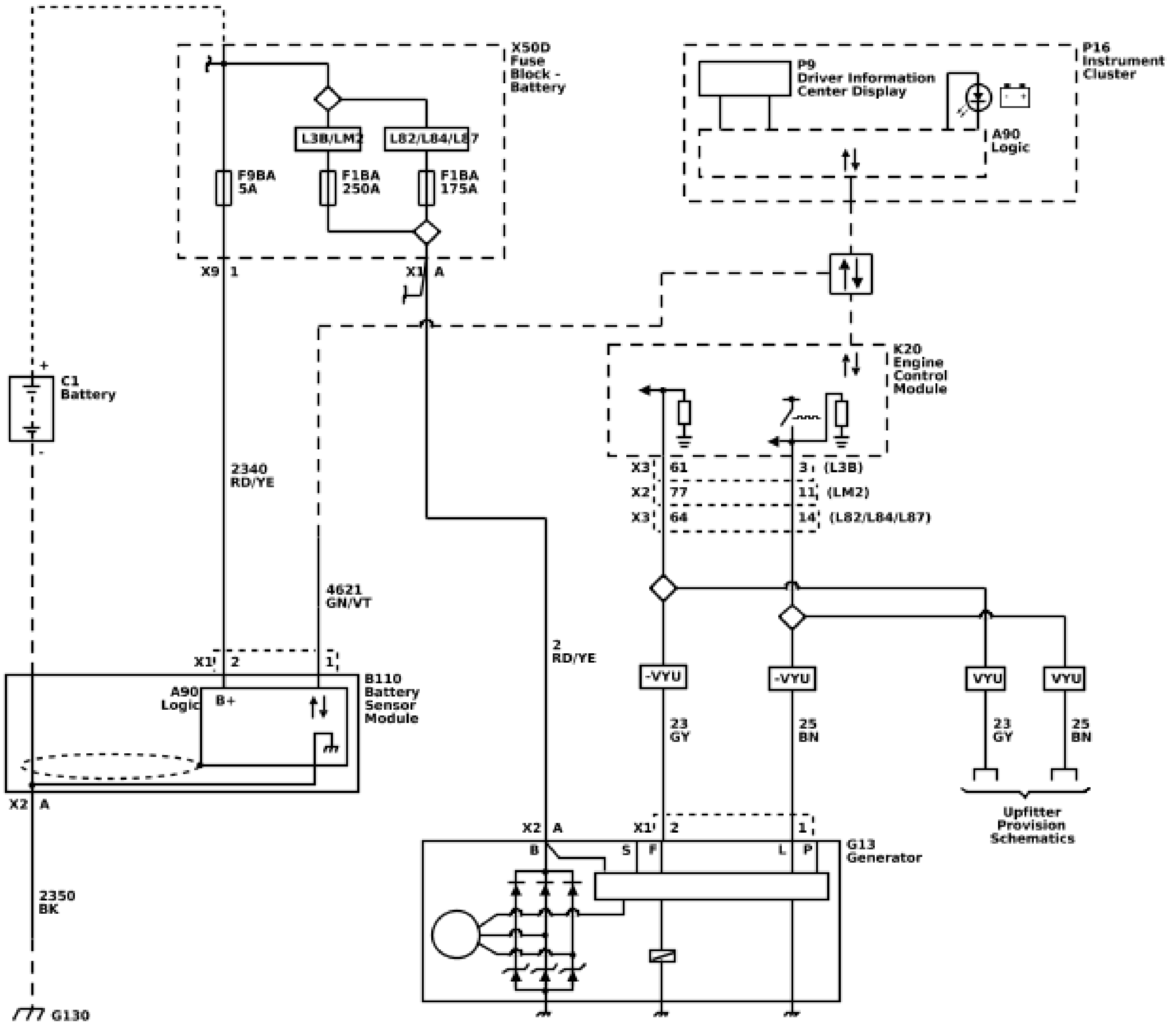

5502081
K71 Transmission Control Module
K84 Keyless Entry Control Module
BTM
K20 Engine Control Module
K9 Body Control Module
-BTM
J226
Power Moding Schematics
1020 WH/VT
1073 WH/BK
S39 Ignition Switch
5V
X3 22
15
6
1
IGN
X1 32 (L3B)
X1 47 (L84)
439 VT/GN
J166
A1
X50A Fuse Block - Underhood
KR73 Ignition Main Relay
F46UA 15A
X1 3 (L3B)
X3 33 (L84)
4325 YE/VT
F2
KR27C Starter Pinion Solenoid Actuator Relay
85
86
30
87
F69UA 40A
C3
F1
4450 BK
G117
X1 2 (L3B)
X1 36 (L84)
625 YE/BK
J174
4358 YE/GN
M64 Starter Motor
2
T19 Power Supply Transformer
5
42
X115
B+
F58UA 30A
KR27 Starter Relay
B2
B1
6 YE
X1 1
2 RD/YE
X2 A
X50D Fuse Block - Battery
F38A 400A
X3 A
C1 Battery
+
-
B110 Battery Sensor Module
2350 BK
G130

Starting and Charging Schematics (Starting (MYC))


X50D Fuse Block - Battery
F38A 400A
F1BA 175A
X3 A
X1 A
C1 Battery
+
-
2350 BK
G130
X1 36
IGN
47
242 RD/GN
625 YE/BK
439 VT/GN
J166
439 VT/GN
X5 A
X3 B2
A1
X50A Fuse Block - Underhood
F58UA 30A
30
86
KR27 Starter Relay
87
85
KR73 Ignition Main Relay
F46UA 15A
X3 B1
C3
2 RD/YE
6 YE
4450 BK
X2 A
X1 1
M64 Starter Motor
M
G117
-BTM
BTM
K84 Keyless Entry Control Module
K9 Body Control Module
5V
X3 22
15
-BTM
-BTM
1020 WH/VT
J226
1073 WH/BK
1020 WH/VT
1
6
S39 Ignition Switch
III
II
Power Moding Schematics
Power Moding Schematics
K20 Engine Control Module
P/N
X1 16
1786 WH/GY
X1 3
T12 Automatic Transmission Assembly
Q8 Control Solenoid Valve Assembly
X2 F
1786 WH
B15 Transmission Internal Mode Switch
Automatic Transmission Controls Schematics
50 GY
X2 A
K71 Transmission Control Module
X1 5
451 BK/WH
G114
LOC
DESC

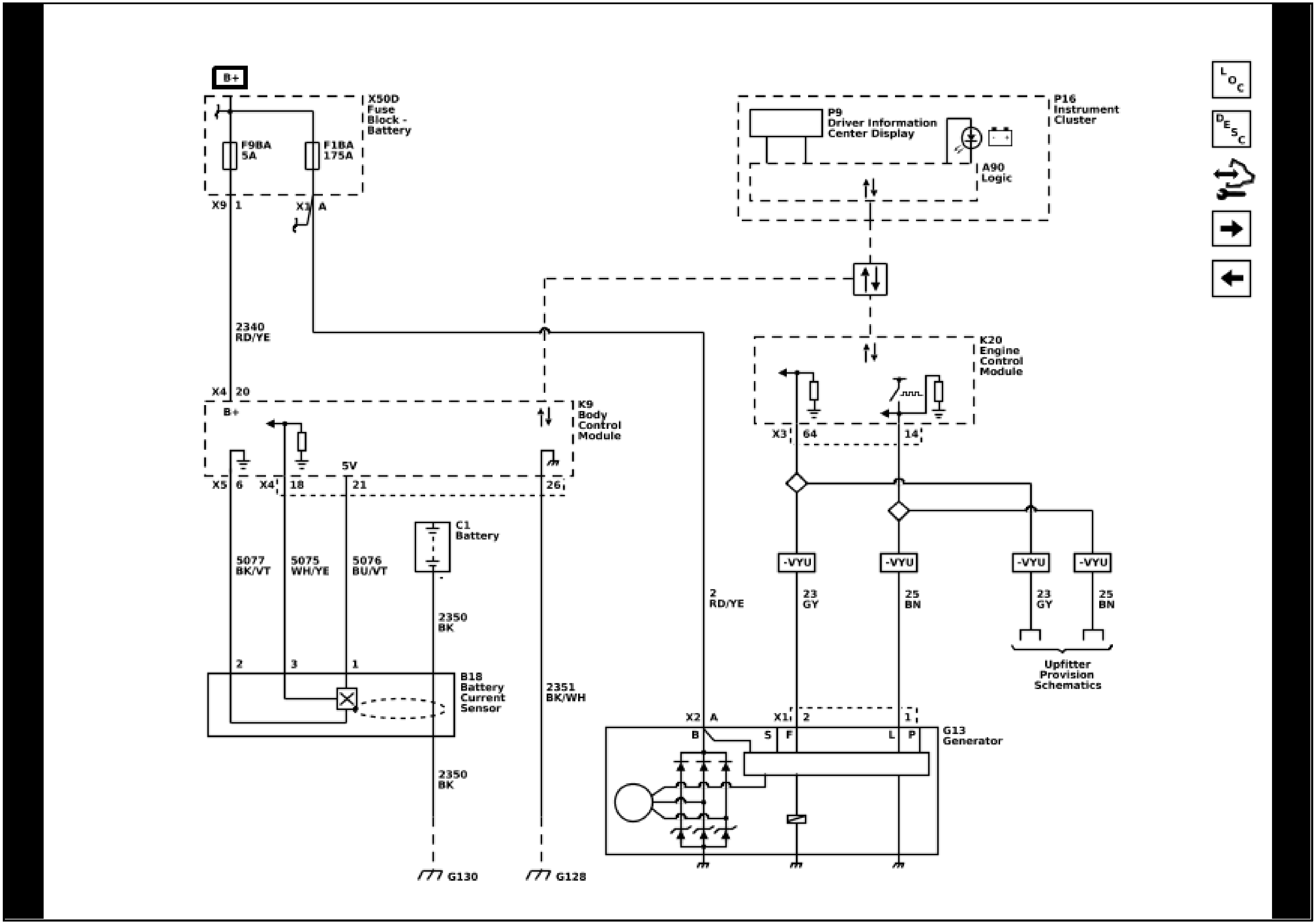
5502082

Starting and Charging Schematics (Charging (KL9))


X50D
Fuse
Block -
Battery
L3B/LM2
L82/L84/L87
F9BA
5A
F1BA
250A
F1BA
175A
X9 1
X1 A
C1
Battery
2340
RD/YE
4621
GN/VT
X1 2
1
B110
Battery
Sensor
Module
A90
Logic
B+
X2 A
2350
BK
G130
2
RD/YE
P16
Instrument
Cluster
P9
Driver Information
Center Display
A90
Logic
K20
Engine
Control
Module
X3 61
X2 77
X3 64
3 (L3B)
11 (LM2)
14 (L82/L84/L87)
-VYU
-VYU
VYU
VYU
23
GY
25
BN
23
GY
25
BN
Upfitter
Provision
Schematics
X2 A
X1 2
1
B
S F
L P
G13
Generator

5502083

Starting and Charging Schematics (Charging (-KL9))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F1BA 175A
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X4 20
B+
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5V
X5 6
X4 18
21
26
5077 BK/VT
5075 WH/YE
5076 BU/VT
C1 Battery
2350 BK
2
3
1
B18 Battery Current Sensor
2350 BK
2351 BK/WH
G130
G128
2 RD/YE
P9 Driver Information Center Display
A90 Logic
P16 Instrument Cluster
K20 Engine Control Module
X3 64
14
-VYU
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-VYU
23 GY
25 BN
23 GY
25 BN
Upfitter Provision Schematics
X2 A
X1 2
1
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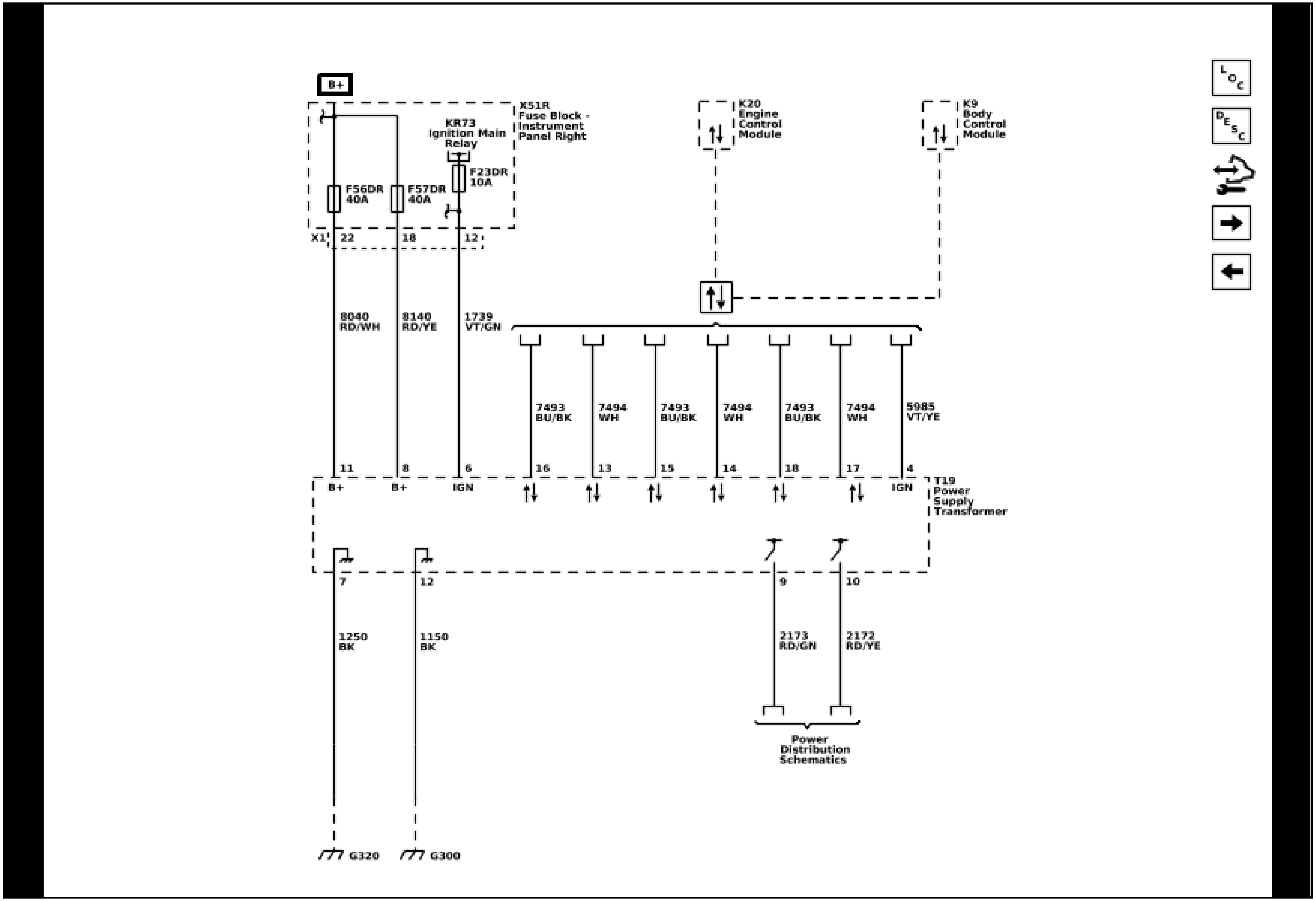
S
F
L
P
G13 Generator
5502084

Starting and Charging Schematics (Power Supply Transformer Power, Ground, Serial Data, and Subsystem References (KL9))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X51R
Fuse Block - Instrument Panel Right
KR73
Ignition Main Relay
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40A
F23DR
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X1
22
18
12
8040
RD/WH
8140
RD/YE
1739
VT/GN
K20
Engine Control Module
K9
Body Control Module
7493
BU/BK
7494
WH
7493
BU/BK
7494
WH
7493
BU/BK
7494
WH
5985
VT/YE
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8
6
16
13
15
14
18
17
4
B+
B+
IGN
IGN
T19
Power Supply Transformer
7
12
9
10
1250
BK
1150
BK
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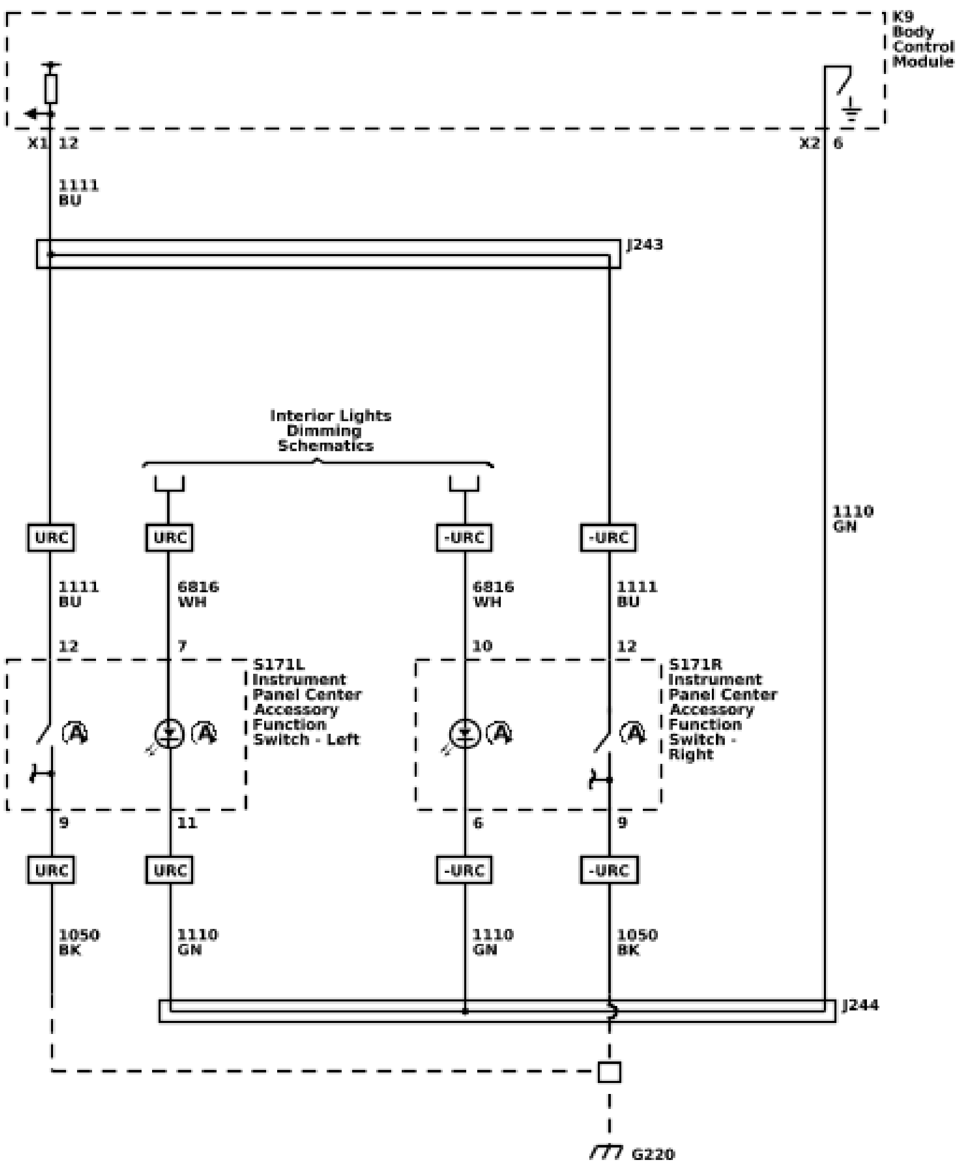
RD/GN
2172
RD/YE
Power Distribution Schematics
G320
G300

5502085

Starting and Charging Schematics (Stop/Start Controls (KL9))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Body
Control
Module
X1 12
X2 6
1111
BU
J243
Interior Lights
Dimming
Schematics
1110
GN
URC
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6816
WH
12
7
10
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
9
11
6
1050
BK
J244
G220

5502086

Description and Operation

Battery Description and Operation

Warning: Batteries produce explosive gases, contain corrosive acid, and supply levels of electrical current high enough to cause burns. Therefore, to reduce the risk of personal injury when working near a battery:

- ***Always shield your eyes and avoid leaning over the battery whenever possible.***
- ***Do not expose the battery to open flames or sparks.***
- ***Do not allow the battery electrolyte to contact the eyes or the skin. Flush immediately and thoroughly any contacted areas with water and get medical help.***
- ***Follow each step of the jump starting procedure in order.***
- ***Treat both the booster and the discharged batteries carefully when using the jumper cables.***

Batteries that are no longer wanted must be disposed of by an approved battery recycler and must never be thrown in the trash or sent to a landfill.

Batteries that are not part of the vehicle itself, not the battery under the hood, must only be transported on public streets for business purposes via approved hazardous material transportation procedures.

Battery storage, charging and testing facilities in repair shops must meet various requirements for ventilation, safety equipment, material segregation, etc.

The maintenance free battery is standard. There are no vent plugs in the cover. The battery is completely sealed except for 2 small vent holes in the side. These vent holes allow the small amount of gas that is produced in the battery to escape.

The battery has 3 functions as a major source of energy:

- Engine cranking
- Voltage stabilizer
- Alternate source of energy with generator overload

Battery Low Start Vehicle Message

The body control module (BCM) monitors battery positive voltage to determine battery state of charge. If one or more of the BCM battery positive voltage terminals measure less than approximately 11.6V compared to the BCM ground circuits, this message will display and four chimes may sound. Start the vehicle immediately. If the vehicle is not started and the battery continues to discharge, the climate controls, heated seats, and audio systems will shut off and the vehicle may require a jump start. These systems will function again after the vehicle is started.

Battery Ratings

A battery has 2 ratings:

- Cold cranking amperage
- Amperage hours

When a battery is replaced use a battery with similar ratings. See battery specification label on the original battery.

Amperage Hours

The amperage hour rating tells you how much amperage is available when discharged evenly over a 20 hour period. The amperage hour rating is cumulative, so in order to know how many constant amperage the battery will output for 20 h, you have to divide the amperage hour rating by 20. Example: If a battery has an amperage hour rating of 74, dividing by 20 = 3.75. Such a battery can carry a 3.75 A load for 20 hours before dropping to 10.5 V. (10.5 V is the fully discharged level, at which point the battery needs to be recharged.) A battery with an amperage hour rating of 55 will carry a 2.75 A load for 20 hours before dropping to 10.5 V.

Cold Cranking Amperage

The cold cranking amperage is an indication of the ability of the battery to crank the engine at cold temperatures. The cold cranking amperage rating is the minimum amperage the battery must maintain for 30 seconds at −18°C (0°F) while maintaining at least 7.2 V. See battery label for the cold cranking amperage rating of this battery.

Charging System Description and Operation

Electrical Power Management Overview

The electrical power management system is designed to monitor and control the charging system and send diagnostic messages to alert the driver of possible problems with the battery and generator. This electrical power management system primarily utilizes existing on-board computer capability to maximize the effectiveness of the generator, to manage the load, improve battery state-of-charge and life, and minimize the system's impact on fuel economy. The electrical power management system performs 3 functions:

- Monitor the battery voltage and estimate the battery condition
- Take corrective actions by boosting idle speeds, and adjusting the regulated voltage
- Perform diagnostics and driver notification

The battery condition is estimated during ignition/vehicle off and during ignition/vehicle on. During ignition/vehicle off the state-of-charge of the battery is determined by measuring the open-circuit voltage. The state-of-charge is a function of the acid concentration and the internal resistance of the battery, and is estimated by reading the battery open circuit voltage when the battery has been at rest for several hours.

Any time the ignition/vehicle is on, the vehicle algorithm continuously estimates battery state-of-charge based on adjusted net amp hours, battery capacity, initial state-of-charge, and calculated temperature.

While the engine is running, the battery degree of discharge is primarily determined by the integrated battery current sensor, to obtain net amp hours.

In addition, the electrical power management function is designed to perform regulated voltage control to improve battery state-of-charge, battery life, and fuel economy. This is accomplished by using knowledge of the battery state-of-charge and temperature to set the charging voltage to an optimum battery voltage level for recharging without detriment to battery life.

Charging System Components

Generator

The engine drive belt drives the generator. When the rotor is spun, it induces an alternating current (AC) into the stator windings. The AC voltage is then sent through a series of diodes for rectification. The rectified voltage has been converted into a direct current (DC) for use by the vehicles electrical system to maintain electrical loads and the battery charge. The voltage regulator integral to the generator controls the output of the generator; It is not serviceable. The voltage regulator controls the amount of current provided to the rotor. If the generator has field control circuit fault, the generator defaults to an output voltage of 13.8 V.

The generator is serviced as a complete assembly. If there is a diagnosed fault in the generator, it must be replaced as an assembly.

Generator Pulley

The pulley drives the Generator via the engine drive belt. There are 2 types of pulleys:

1. Conventional solid Pulley which is bolted to the Generator stator shaft. This Pulley can be serviced separately.

2. One Way Clutch Pulley or Overrunning Alternator Decoupler Pulley allows the Generator to spin freely when the engine rapidly slows down on sudden deceleration. This part is not serviceable and the Generator needs to be replaced as an assembly.

Body Control Module (BCM)

The BCM communicates with the Engine Control Module (ECM) and the instrument cluster for electrical power management operation. The BCM determines the output of the generator and sends the information to the ECM for control of the generator turn on signal circuit. It monitors the generator field duty cycle signal circuit information sent from the ECM for control of the generator. It monitors the battery current sensor, the battery positive voltage circuit, and estimates battery temperature to determine battery state of charge. The BCM also performs idle boost.

Battery Current Sensor (if applicable)

The Battery Current Sensor is a serviceable component that is connected to the negative battery cable at the battery. The battery current sensor is a 3-wire hall effect current sensor. The battery current sensor monitors the battery current. It directly inputs to the BCM. It creates a 5 volt Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. Between 0–5% and 95–100% are for diagnostic purposes.

Battery Sensor Module (if applicable)

The BCM monitors the Battery Sensor Module for battery state of current, state of health, and battery charge via serial data. If the battery is determined to be in poor state of health or having a low state of charge, the BCM will not allow the ECM to perform an auto-stop.

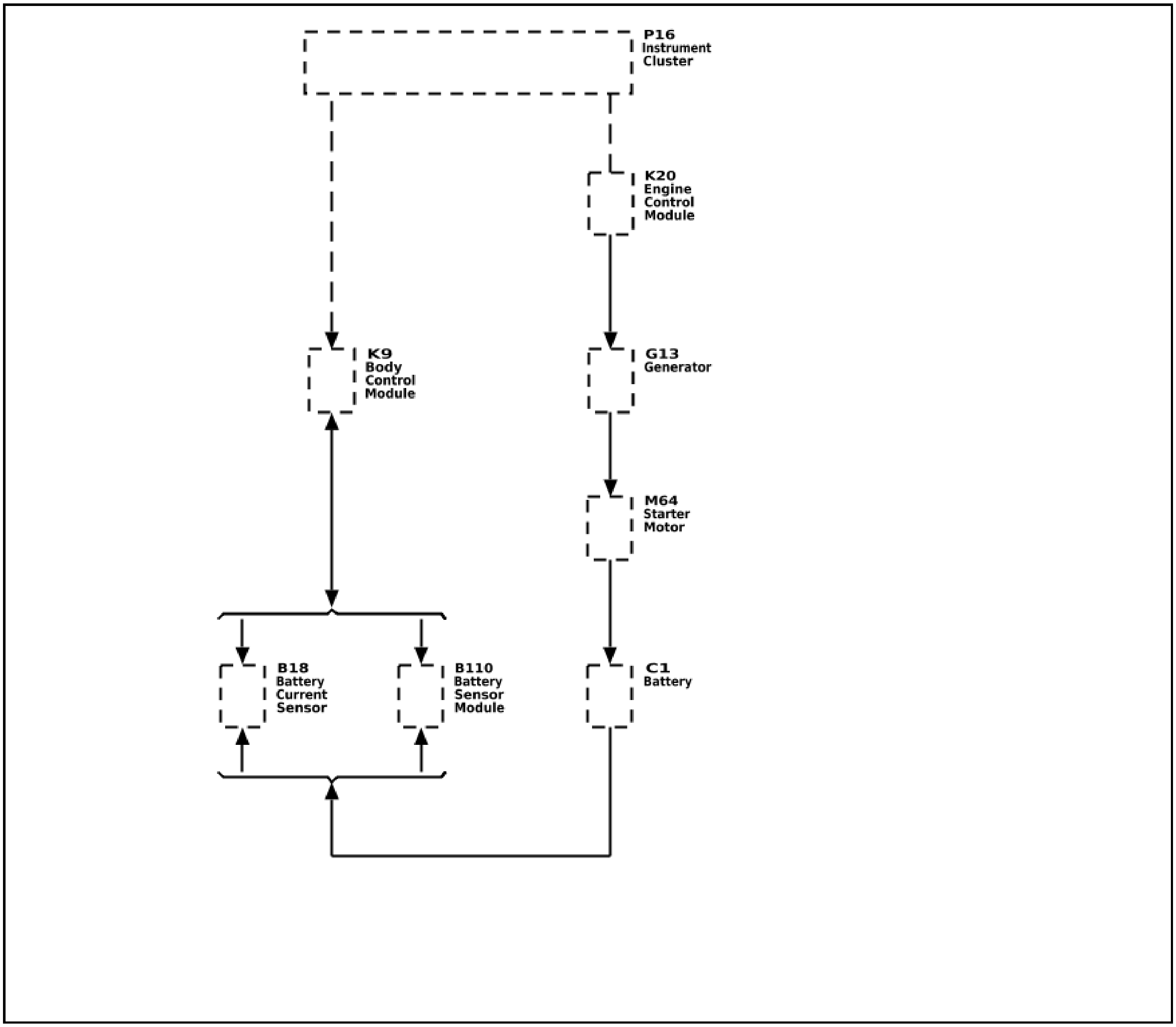
Engine Control Module (ECM)

When the engine is running, the generator turn-on signal is sent to the generator from the ECM, turning on the regulator. The generator's voltage regulator controls current to the rotor, thereby controlling the output voltage. The rotor current is proportional to the electrical pulse width supplied by the regulator. When the engine is started, the regulator senses generator rotation by detecting AC voltage at the stator through an internal wire. Once the engine is running, the regulator varies the field current by controlling the pulse width. This regulates the generator output voltage for proper battery charging and electrical system operation. The generator field duty terminal is connected internally to the voltage regulator and externally to the ECM. When the voltage regulator detects a charging system problem, it grounds this circuit to signal the ECM that a problem exists. The ECM monitors the generator field duty cycle signal circuit, and receives control decisions based on information from the BCM.

Instrument Cluster

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

The instrument cluster also provides customer notification if there is a concern with the charging system. There are two means of notification: a charge indicator on the instrument cluster and/or a service system message displayed on the Driver Information Center (DIC) if equipped.


P16
Instrument
Cluster
K20
Engine
Control
Module
K9
Body
Control
Module
G13
Generator
M64
Starter
Motor
B18
Battery
Current
Sensor
B110
Battery
Sensor
Module
C1
Battery
3603724

Charging System Operation

The purpose of the charging system is to maintain the battery charge and vehicle loads. There are 6 modes of operation and they include:

- Battery Sulfation Mode
- Charge Mode
- Fuel Economy Mode
- Head lamp Mode
- Start Up Mode
- Voltage Reduction Mode

The ECM Controls the Generator through the generator turn–on signal circuit, also known as the Generator L-terminal. The ECM monitors the generator performance though the Generator field duty cycle signal circuit, also known as the generator F-terminal.

The Generator turn–on signal (Generator L-terminal) is a Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. 0–5% and 95–100% are for diagnostic purposes, with 0–5% monitoring for an open circuit and 95–100% monitoring for a short to ground at a fixed 13.8 V. The following table shows the commanded duty cycle and output voltage of the Generator:

Commanded Duty Cycle	Generator Output Voltage (+/- .25 V)
0–5%	13.8 V
10%	11 V
20%	11.56 V
30%	12.13 V
40%	12.69 V
50%	13.25 V
60%	13.81 V
70%	14.38 V
80%	14.94 V
90%	15.5 V
95–100%	13.8 V

The Generator provides a PWM feedback signal of the Generator voltage output through the Generator field duty cycle signal circuit to the ECM. This information is sent to the Body Control Module (BCM). The Generator field duty cycle signal (Generator F-terminal) is a PWM signal of 60–460 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–100%. 0–5% is reserved for diagnostic purposes.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage displayed in the DIC to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

Charging System Modes

Battery Sulfation Mode

The BCM will enter this mode when the interpreted Generator output voltage is less than 13.2 V for 45 minutes. When this condition exists the BCM will enter Charge Mode for 2–3 minutes. The BCM will then determine which mode to enter depending on voltage requirements.

Charge Mode

The BCM will enter Charge Mode when ever one of the following conditions are met:

- Windshield wipers are ON for more than 3 s.
- Climate Control Voltage Boost Mode Request is true, as sensed by the HVAC control module via serial data. High speed cooling fan, rear defogger, and HVAC high speed blower operation can cause the BCM to enter the Charge Mode.
- The estimated battery temperature is less than 0° C (32°F).
- Battery State of Charge is less than 80%.
- Vehicle speed is greater than 145 km/h (90 mph)
- A current sensor malfunction exists.
- System voltage is determined to be below 12.56 V

When any one of these conditions is met, the system will set targeted generator output voltage to a charging voltage between 13.9–15.5 V, depending on the battery state of charge and estimated battery temperature.

Fuel Economy Mode

The BCM will enter Fuel Economy Mode when the estimated battery temperature is at least 0°C (32°F) but less than or equal to 80°C (176°F), the calculated battery current is less than 15 A and greater than −8 A, and the battery state-of-charge is greater than or equal to 80%. Its targeted generator output voltage is the open circuit voltage of the battery and can be between 12.5–13.1 V. When fuel economy mode is active, the generator is not charging, only maintaining open circuit battery voltage. The BCM will exit this mode and enter Charge Mode when any of the conditions described above are present.

Headlamp Mode

The BCM will enter Headlamp Mode when ever the head lamps are ON (high or low beams). Voltage will be regulated between 13.9–14.5 V.

Start Up Mode

When the engine is started the BCM sets a targeted generator output voltage of 14.5 V for 30 s.

Tow/Haul Mode (if applicable)

Pressing the Tow/Haul Mode button located on the center stack, the vehicle system voltage is raised and the remote (non-vehicle) battery will be charged. Having the headlamps on will raise the system voltage and if the Tow/Haul button is applied it will not serve any purpose. The voltage is regulated between 13.9-14.5 V.

Instrument Cluster Operation

Charge Indicator Operation

The instrument cluster illuminates the charge indicator and displays a warning message in the driver information center if equipped, when the one or more of the following occurs:

- The ECM detects that the generator output is less than 11 V or greater than 16 V. The instrument cluster receives a serial data message from the ECM requesting illumination.
- The instrument cluster determines that the system voltage is less than 11 V or greater than 16 V for more than 30 s. The instrument cluster receives a serial data message from the BCM indicating there is a system voltage range concern.
- The instrument cluster performs the displays test at the start of each ignition cycle. The indicator illuminates for approximately 3 s.

Driver Information Center Message: BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM

The BCM and the ECM will send a serial data message to the driver information center for the BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM message to be displayed. It is displayed when a charging system DTC is a current DTC. The message is turned off when the conditions for clearing the DTC have been met.

Voltmeter Gauge and/or System Voltage Display (if equipped)

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage display in the driver information center to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

Electrical Power Management Description and Operation

Electrical Power Management

The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition.

Each electrical power management function, either idle boost or load shed, is activated in incremental steps. For example, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

Idle Boost and Load Shed With Current Sensor

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	—	First level Idle boost requested
Idle Boost 1 Start	—	—	Battery has a net loss greater than 0.6 Ah	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 11 V	—	First level Idle boost requested
Idle Boost 1 End	Greater Than −10°C (14°F)	Greater Than 12 V	Battery has a net loss less than 0.2 Ah	First level Idle boost request cancelled
Idle Boost 2 Start	—	—	Battery has a net loss greater than 1.6 Ah	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 11 V	—	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12 V	Battery has a net loss less than 0.8 Ah	Second level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 Ah	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle
Load Shed 1 Start	—	Less Than 11 V	—	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12 V	Battery has a net loss of less than 2 Ah	Clear Load Shed 1
Idle Boost 3 Start	—	—	Battery has a net loss of 10 Ah	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 11 V	—	Third level Idle boost requested
Idle Boost 3 End	—	Greater Than 12 V	Battery has a net loss of less than 6.0 Ah	Third level Idle boost request cancelled

Idle Boost and Load Shed With Current Sensor (cont'd)

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Load Shed 2 Start	—	—	Battery has a net loss greater than 12 Ah	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 11 V	—	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 End	—	Greater Than 12 V	Battery has a net loss of less than 8 Ah	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Battery has a net loss greater than 20 Ah	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 Start	—	Less Than 11 V	—	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.6 V	Battery has a net loss of less than 13 Ah	Clear Load Shed 3

Idle Boost and Load Shed Without Current Sensor (based on battery voltage)

Function	Battery Temperature Calculation	Battery Voltage Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 12.6 V	First level Idle boost requested
Idle Boost 1 End	Greater Than −15°C (5°F)	—	First level Idle boost request cancelled
Idle Boost 1 End	—	Greater Than 13 V	First level Idle boost request cancelled
Idle Boost 2 Start	—	Less Than 12.4 V	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12.5 V	Second level Idle boost request cancelled
Load Shed 1 Start	—	Less Than 12.3 V	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12.4 V	Clear Load Shed 1
Idle Boost 3 Start	—	Less Than 10 V	Third level Idle boost requested

Idle Boost and Load Shed Without Current Sensor (based on battery voltage) (cont'd)

Function	Battery Temperature Calculation	Battery Voltage Calculation	Action Taken
Idle Boost 3 End	—	Greater Than 12.3 V	Third level Idle boost request cancelled
Load Shed 2 Start	—	Less Than 12.1 V	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 End	—	Greater Than 12.2 V	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.0 V	Clear Load Shed 3

Load Shed System Description and Operation

Electrical Power Management

The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition.

Each electrical power management function, either idle boost or load shed, is discrete. No two functions are active at the same time. Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	—	First level Idle boost requested
Idle Boost 1 Start	—	—	Battery has a net loss greater than 0.6 AH	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 10.9 V	—	First level Idle boost requested
Idle Boost 1 End	Greater Than −15°C (5°F)	Greater Than −12 V	Battery has a net loss less than 0.2 AH	First level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Load Shed 1 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12 V	Battery has a net loss of less than 2 AH	Clear Load Shed 1
Idle Boost 2 Start	—	—	Battery has a net loss greater than 1.6 AH	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 10.9 V	—	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12 V	Battery has a net loss less than 0.8 AH	Second level Idle boost request cancelled
Idle Boost 3 Start	—	—	Battery has a net loss of 10.0 AH	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 10.9 V	—	Third level Idle boost requested
Idle Boost 3 End	—	Greater Than 12 V	Battery has a net loss of less than 6.0 AH	Third level Idle boost request cancelled
Load Shed 2 Start	—	Less Than 10.9 V	Battery has a net loss greater than 12 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 End	—	Greater Than 12.6 V	Battery has a net loss of less than 10.5 AH	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Battery has a net loss greater than 20 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.6 V	Battery has a net loss of less than 15 AH	Clear Load Shed 3

Starting System Description and Operation

Starter Motor Operation (Without KL9)

The starter motors are non-repairable. They have pole pieces that are arranged around the armature. Both solenoid windings are energized. The pull-in winding circuit is completed to the ground through the starter motor. The windings work together magnetically to pull and hold in the plunger. The plunger moves the shift lever. This action causes the starter drive assembly to rotate on the armature shaft spline as it engages with the flywheel ring gear on the engine. Moving at the same time, the plunger also closes the solenoid switch contacts in the starter solenoid. Full battery voltage is applied directly to the starter motor and it cranks the engine.

As soon as the solenoid switch contacts close, current stops flowing thorough the pull-in winding because battery voltage is applied to both ends of the windings. The hold-in winding remains energized. Its magnetic field is strong enough to hold the plunger, shift lever, starter drive assembly, and solenoid switch contacts in place to continue cranking the engine. When the engine starts, pinion overrun protects the armature from excessive speed until the switch is opened.

When the crank signal is removed, the starter relay opens and battery voltage is removed from the starter solenoid S terminal. Current flows from the motor contacts through both windings to the ground at the end of the hold-in winding. However, the direction of the current flow through the pull-in winding is now opposite the direction of the current flow when the winding was first energized.

The magnetic fields of the pull-in and hold-in windings now oppose one another. This action of the windings, along with the help of the return spring, causes the starter drive assembly to disengage and the solenoid switch contacts to open simultaneously. As soon as the contacts open, the starter circuit is turned off.

Enhanced Starter Motor Operation (KL9)

The Engine Stop/Start system in GM vehicles automatically turns off the engine when the vehicle comes to a stop under certain driving conditions, and can quickly restart the engine in about 0.3 seconds when commanded to do so.

In order to smoothly restart the engine as quickly as possible while managing the greater number of engine starts, the Stop/Start system uses an enhanced starter motor that operates differently from a conventional starter motor. It has a high performance electric motor and a stronger pinion engagement mechanism than a conventional starter. It also has independent control of the pinion and motor.

The enhanced starter motor continues using the typical pinion engagement mechanism with a starter solenoid that drives the pinion gear to engage or disengage the flywheel of the engine. When engaged, the starter motor can rotate the engine flywheel and, in turn, the crankshaft.

On the enhanced starter of a Stop/Start system the operation is done in two separate functions inside the solenoid, Starter Motor and Pinion Actuator. Each function controlled individually by the ECM. There are two separate relays to control the two separate parts of the enhanced solenoid:

- KR27 Starter Motor Relay
- KR27C Starter Pinion Actuator Relay

The two individually-controlled relays allow for smooth engagement of the pinion gear into the flywheel with minimum noise and wear.

When the vehicle is coming to a stop, just before the engine stops rotating (at approximately 50 RPM) during stop/start operation, the ECM energizes the Starter Pinion Solenoid Actuator Relay to easily push the pinion gear into the flywheel gear without gear clash. (Fig. 8) When the engine stops rotating during Stop/Start operation (Auto Stop mode), the starter pinion gear is fully engaged, ready for the starter motor to become energized to quickly start the engine again.

A secondary need for the starter pinion to be driven into the flywheel gear before the engine stops rotating is to address quickly changing demands on the engine. For example, when a driver is slowing nearly to a stop — and the Stop/Start system is preparing for Auto Stop mode — but suddenly decides to release the brake and accelerate

In this situation, the engine has already stopped rotating, or nearly so. A conventional starter cannot restart the engine until the engine has completely stopped. However, with the enhanced starter, the starter pinion gear is fully engaged and ready to begin rotating the engine even before it fully stops turning. Otherwise, the engine would actually have to stop rotating before the pinion can engage smoothly to begin a restart.

To prevent a lag in engine operation, the ECM uses predictive speed matching of the flywheel gear speed and the pinion gear speed to engage the pinion gear into the flywheel gear without gear clash before the engine fully stops. By predicting how long it takes the starter motor to spin up using an algorithm, the pinion gear speed can be matched to the flywheel gear speed. The result is an almost instant restart that is possible at extremely low engine speeds.

Circuit Description

Keyless Start

When the Ignition mode switch is placed in the crank position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the crank position. The BCM then sends a serial data message to the engine control module (ECM) that crank has been requested. The ECM then verifies that the clutch is fully depressed or the automatic transmission is in Park/Neutral. If it is, the ECM then supplies 12 V to the control circuit of the starter relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

Key Start

When the ignition switch is placed in the Start position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the Start position. The BCM then sends a message to the engine control module (ECM) notifying it that CRANK has been requested. The ECM verifies that the transmission is in Park or Neutral. If it is, the ECM then supplies 12 V to the control circuit of the crank relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

Stop/Start System Description and Operation (KL9)

The Stop/Start System is used to improve fuel efficiency in stop/start driving. The vehicle automatically shuts down the engine in appropriate conditions at a traffic light, for example, resulting in zero tail pipe emissions and saving fuel which otherwise is used idling the engine when stationary. The engine instantly restarts when the driver is ready to move away.

As soon as the driver prepares to move away (by releasing the brake pedal and/or depressing the accelerator pedal), the engine will start; it only takes the system around 0.3 s to start the engine.

To support the increased number of engine starts, the starter motor is upgraded with a high performance electric motor and a stronger pinion engagement mechanism with reduced noise levels.

Along with the upgraded starter motor, advanced battery technology is required to ensure the vehicles battery can handle the frequent charge and discharge cycles common with stop/start operation. There is an intelligent battery sensor connected to the battery which continually monitors the battery charge and healthy state. The engine control module (ECM) uses this information from the intelligent battery sensor to determine if the battery charge and health is sufficient for an Stop/Start condition.

The Stop/Start system can reduce fuel consumption and carbon dioxide (CO2) emissions by up to 5% in mixed driving conditions. In an urban environment and in heavy traffic with frequent stops the savings may increase to as much as 10%.

There are also sophisticated controls in place to help ensure the Stop/Start System does not compromise the needs of either the driver or vehicle. For the engine to shutdown, the vehicle must be below 5 km/h (3 MPH), the selector lever in position D, and brake pedal depressed. To restart, the driver simply releases the brake pedal and the enhanced starter motor engages the engine. When the engine has been shut down by the Stop/Start System, a control indicator will be illuminated in the Driver Information Center (DIC). When the engine is restarted, the control indicator in the DIC extinguishes.

To ensure neither the needs of the driver or vehicle are compromised the engine will not shut down in the following circumstances:

- Ambient and coolant temperature correlation does not match specified values.
- Ambient temperature is less than −10°C (14°F)
- Battery temperature is less than 0°C (32°F) or greater than 55°C (131°F)
- Driver seat belt is not fastened and the drivers door is not fully closed (not applicable to vehicles in North America)
- HVAC system demand is high
- HVAC defrost has been selected
- Battery charge is low
- The learn procedure needs to be completed on the Battery Sensor Module

Likewise the engine will automatically restart if:

- Driver door opened and driver seat belt unbuckled (not applicable to vehicles in North America)
- Engine hood opened
- Battery charge is low
- HVAC demand increases
- Vehicle speed increases
- Brake booster vacuum has been reduced
- Engine coolant temperature is greater than 125°C (257°F)
- Economy mode turned OFF by driver
- Autostop time exceeded 2 min

When the Stop/Start System has shut down the engine, and the ambient temperature is below 15°C (59°F), the ECM will activate the Stop/Start auxiliary relay which controls the electric engine coolant pump motor to continually circulate the engine coolant through the engine while the engine is off. This is to ensure the engine and passenger compartment temperature is maintained while off. Once the Stop/Start System has restarted the engine, the ECM will turn off the electric coolant pump motor, thus allowing the engines internal coolant pump to circulate the engine coolant. The Stop/Start System is automatically activated each time the ignition switch is turned on, although there is an ECO Switch on the instrument panel to disable the system, if the driver so desires.

Autostop Criteria

The ECM will send an Autostop state message to the body control module (BCM) and shut down the engine when all of the following criteria is met. The BCM will transmit the Autostop state message to the instrument cluster which will display the Autostop indicator in the tachometer display.

- Economy mode turned ON
- Initial minimum vehicle speed during drive cycle must be 19 km/h (12 MPH) or greater. Subsequent autostop minimum speed may vary from 2-10 km/h (1-6 MPH), depending on vehicle
- Ambient and engine coolant temperature correlation meets specified values.
- Ambient and transmission fluid temperature correlation meets specified values.
- Hood switch status is closed
- Driver door status is closed
- Driver seat belt status is buckled
- Brake booster vacuum is greater than 45 kPa (7 PSI)
- Transmission gear selector is in the Drive position
- Vehicle speed is less than 5 km/h (3 MPH)
- Engine speed is below 1 500 RPM
- Engine coolant temperature is less than 120°C (248°F)
- Ambient temperature is greater than −10°C (14°F)
- No A/C compressor request from HVAC (A/C or Defrost modes)
- Battery voltage greater than 12 V
- Battery state of charge greater than 75% (changes with state of health)

Autostop Enable Ambient and Engine Coolant Temperature Table

Ambient Temperature	Minimum Coolant Temperature	Autostop Enable
−10°C (14°F)	60°C (140°F)	Yes
0°C (32°F)	50°C (122°F)	Yes
6°C (43°F)	40°C (104°F)	Yes
12°C (54°F)	30°C (86°F)	Yes
20°C (68°F)	18°C (64°F)	Yes

Autostop Enable Ambient and Engine Coolant Temperature Table (cont'd)

Ambient Temperature	Minimum Coolant Temperature	Autostop Enable
30°C (86°F)	18°C (64°F)	Yes

Autostart Criteria

The ECM will send an Autostart state message to the BCM. If all of the following conditions are true the ECM and BCM will restart the vehicle.

Driver Enabled Conditions that will engage Autostart:

- Driver removes pressure from the brake or depresses the accelerator pedal while the vehicle is in the forward Drive gear

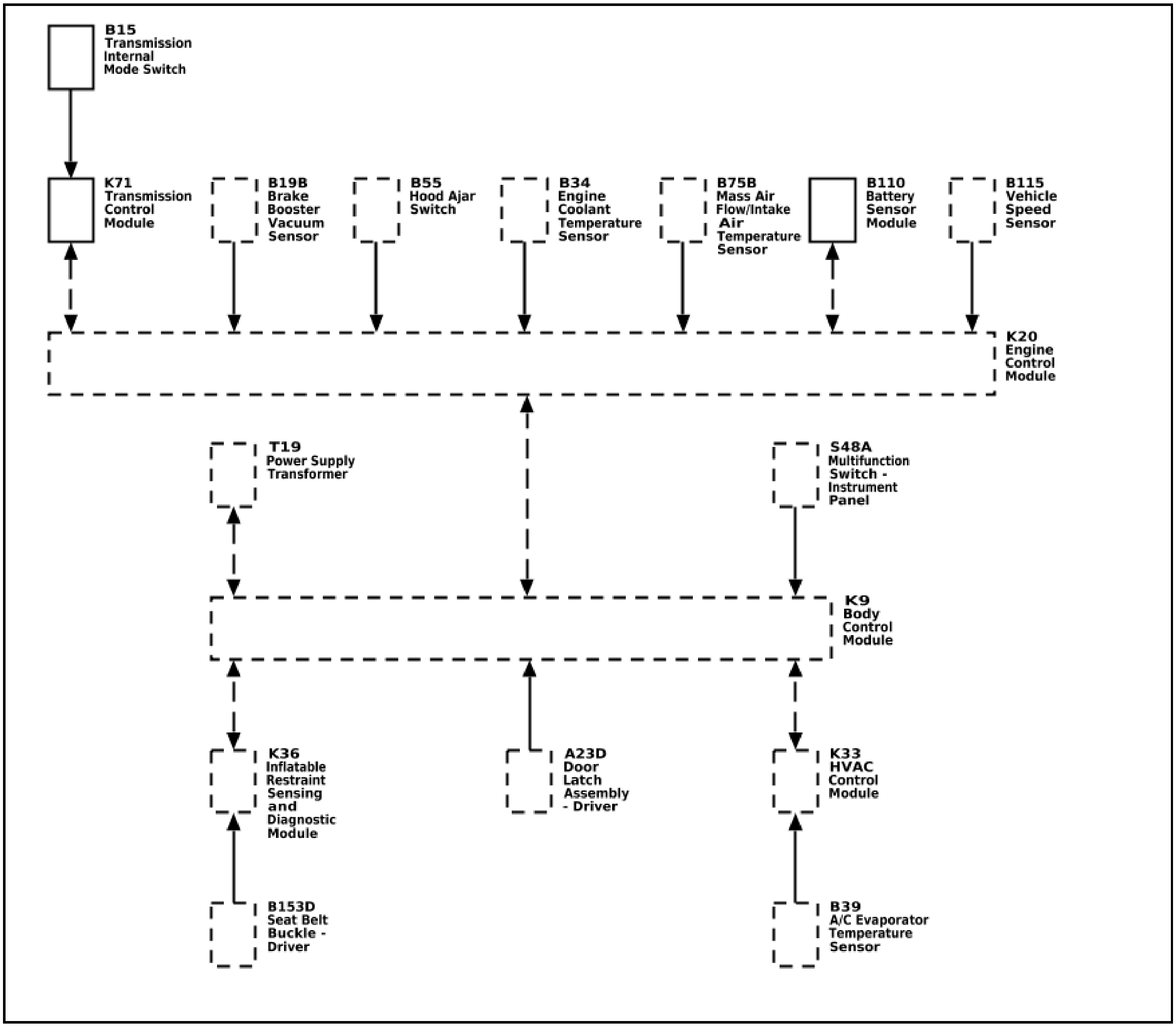
System Enabled Conditions that will engage Autostart

Note: If one or more of the following conditions occur, the system will force the engine to restart.

- Economy mode turned OFF
- Brake booster vacuum is less than 40 kPa (6 PSI)
- HVAC inside air temperature changes than 3°C (5°F) (with HVAC Automatic)
- A/C compressor request from HVAC (A/C or Defrost modes)
- Battery voltage less than 11 V,
- Battery state of charge is less than 73% (changes with state of health)
- Driver door status changes to open and driver seat belt status changes to unbuckled (not applicable to vehicles in North America)
- Hood switch status changes to open
- Autostop time exceeded 2 min

If the crank time exceeds 2 s, a manual ignition switch restart will be necessary.

Start Stop Block Diagram


B15
Transmission Internal Mode Switch
K71
Transmission Control Module
B19B
Brake Booster Vacuum Sensor
B55
Hood Ajar Switch
B34
Engine Coolant Temperature Sensor
B75B
Mass Air Flow/Intake Air Temperature Sensor
B110
Battery Sensor Module
B115
Vehicle Speed Sensor
K20
Engine Control Module
T19
Power Supply Transformer
S48A
Multifunction Switch - Instrument Panel
K9
Body Control Module
K36
Inflatable Restraint Sensing and Diagnostic Module
A23D
Door Latch Assembly - Driver
K33
HVAC Control Module
B153D
Seat Belt Buckle - Driver
B39
A/C Evaporator Temperature Sensor

4148368

System Components

Engine Control Module (ECM)

The engine control module (ECM) monitors the inputs from the engine coolant temperature (ECT) sensor, vehicle speed sensor (VSS), hood ajar switch, brake booster vacuum sensor, the clutch pedal position sensor, the manual transmission neutral position switch and engine speed to determine Autostart and Autostop conditions. The ECM also controls the auxiliary coolant pump motor.

Transmission Control Module (TCM)

The transmission control module monitors the inputs from the transmission neutral safety switch to determine the driver selected gear. This information is transmitted to the ECM via serial data to support the Auto Stop Start algorithm.

Engine Coolant Temperature sensor

The ECT sensor is used to determine engine operating temperature.

Intake Air Temperature Sensor

The ECM uses this sensor to monitor ambient air temperature. If too cold, the Autostop will not occur.

Inside air temperature sensor

The HVAC control module monitors the passenger compartment temperature sensor to determine the temperature inside the passenger compartment. The HVAC control module sends this temperature reading to the ECM on the data communication circuit. The ECM uses this temperature values to determine if a restart is requires based on the temperature inside the passenger compartment.

Vehicle speed sensor

The vehicle speed sensor is used to determine vehicle speed. If vehicle speed is detected above a calculated value during an Autostop condition, the ECM will start the engine.

Hood Ajar Switch

If the hood switch is in the open position, the vehicle will not Autostop. If the hood is opened during Autostop, the vehicle will automatically restart.

Brake Booster Vacuum Sensor

The ECM monitors vacuum in order to ensure proper power assist for the brake pedal. If the ECM determines vacuum is too low, it will restart the engine.

Brake Pedal Position Sensor & Accelerator Pedal Position Sensor

The ECM monitors both the brake pedal position sensor and the accelerator pedal position sensor to determine the level of activation for each. While the accelerator pedal is in it’s at rest position with no pressure applied by the operator, a partially depressed Brake pedal will cause the ECM to prepare the engine for an Autostop event. When the vehicle is in an auto stop event and the status of the brake pedal position sensor changes from meeting the autostop criteria to not meeting this criteria the engine will be restarted provided all of the other conditions to allow an autostart are met. If the Accelerator pedal is moved from its at rest position the vehicle will also enter an auto start event if all other conditions to support an autostart event, except for the brake pedal position, are met.

Transmission Gear Shift Position Switch

The transmission gear shift position switch is used to determine if the transmission is in the proper state to allow an auto stop/start event. The ECM will not allow Autostop until the brake is engaged, the transmission is in the forward gear position and then the vehicle slows to below the minimum speed required to allow and autostop while meeting all of the other minimum criteria to support an autostop event.

Coolant Pump Motor

The ECM will turn on the auxiliary coolant pump motor during Autostop to maintain engine operating temperature and also maintain HVAC temperature. Once the engine is running, the ECM will turn off the coolant pump motor.

Body Control Module (BCM)

The body control module (BCM) monitors the ECO switch in order to enable or disable the system. It is also the master of the low speed communication bus and transfers the appropriate messages to the instrument cluster and the HVAC.

Intelligent Battery Sensor

The ECM monitors the intelligent battery sensor for battery state of current, state of health, and battery charge via the data communication bus. If the battery is determined to be in poor state of health or having a low charge, the ECM will not allow Autostop to occur.

ECO Switch

The ECO switch can disable the Autostart system if desired.

Power Supply Transformer

The DC to DC converter monitors battery voltage and will maintain operating voltage to the radio, instrument cluster and instrument panel displays. The DC to DC converter will provide a boosted voltage to sensitive loads during Autostart to ensure proper operation of the driver informational displays.

Driver Door Switch

The BCM monitors the driver door switch at all times. The BCM will not allow Autostop if the door is ajar and will Autostart if the driver door is opened and the seat belt unbuckled during Autostop.

Driver Seat Belt Switch

The BCM monitors the driver seat belt switch at all times. The BCM will Autostart if the seat belt is unbuckled and the driver door opened during Autostop.

Instrument Cluster

In order to differentiate between a normal engine shut down (engine speed 0 RPM) and when the engine has been shut down by the Stop/Start System, the tachometer needle will rest at the Autostop indicator icon (500 RPM point) indicating the engine has been shut down by the Stop/Start System. Once the engine is restarted, or the ECO button has disengaged Autostop, the tachometer will function normally.

BLANK

Section 6

HVAC

Heating, Ventilation, and Air Conditioning 6-3
Description and Operation 6-3
Heating and Air Conditioning System Description and Operation 6-3
HVAC - Automatic 6-4
Schematic and Routing Diagrams 6-4
HVAC Schematics 6-5
Description and Operation 6-12
Automatic HVAC Description and Operation 6-12
HVAC - Manual 6-15
Schematic and Routing Diagrams 6-15
HVAC Schematics (C4P/C67) 6-16
Description and Operation 6-23
Manual HVAC Description and Operation 6-23

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Heating, Ventilation, and Air Conditioning

Description and Operation

Heating and Air Conditioning System Description and Operation

Engine Coolant

Engine coolant is the key element of the heating system. The engine thermostat controls the normal engine operating coolant temperature. Coolant pumped out of the engine enters the heater core through the inlet heater hose. The air flowing through the Heating, Ventilation, and Air Conditioning (HVAC) module absorbs the heat of the coolant flowing through the heater core. The coolant then exits the heater core through the heater outlet hose and returns back to the engine block.

Air Conditioning

Refrigerant is the key element in an air conditioning system. R–1234yf is a very low temperature gas that can transfer the undesirable heat from the passenger compartment to the outside air.

The air conditioning compressor is belt driven and operates when the magnetic clutch is engaged. The compressor builds pressure in the air conditioning system. Compressing the refrigerant also adds heat to the refrigerant. The refrigerant is discharged from the compressor through the discharge hose, and forced to flow to the condenser and then through the balance of the air conditioning system. The air conditioning system is mechanically protected with the use of a high pressure relief valve. If the high pressure air conditioning switch were to fail or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief will pop open and release refrigerant from the system.

Compressed refrigerant enters the condenser in a high temperature, high pressure vapor state. As the refrigerant flows through the condenser, the heat of the refrigerant is transferred to the ambient air passing through the condenser. Cooling the refrigerant causes the refrigerant to condense and change from a vapor to a liquid state.

The condenser is located in front of the radiator for maximum heat transfer. The condenser is made of aluminum tubing and aluminum cooling fins, which allows rapid heat transfer for the refrigerant. The semi-cooled liquid refrigerant exits the condenser and flows through the liquid line, to the Thermostatic Expansion Valve (TXV).

The TXV is located at the evaporator inlet. The TXV is the dividing point for the high and the low pressure sides of the air conditioning system. As the refrigerant passes through the TXV, the refrigerant is lowered. Due to the pressure differential on the liquid refrigerant, the refrigerant will begin to boil at the TXV. The TXV also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the TXV flows into the evaporator core in a low pressure, liquid state. Ambient air is drawn through the HVAC module and passes through the evaporator core. Warm and moist air will cause the liquid refrigerant to boil inside the evaporator core.

The boiling refrigerant absorbs heat from the ambient air and draws moisture onto the evaporator. The refrigerant exits the evaporator through the suction line and back to the compressor, in a vapor state. This completes the air conditioning cycle of heat removal. At the compressor, the refrigerant is compressed again and the cycle of heat removal is repeated.

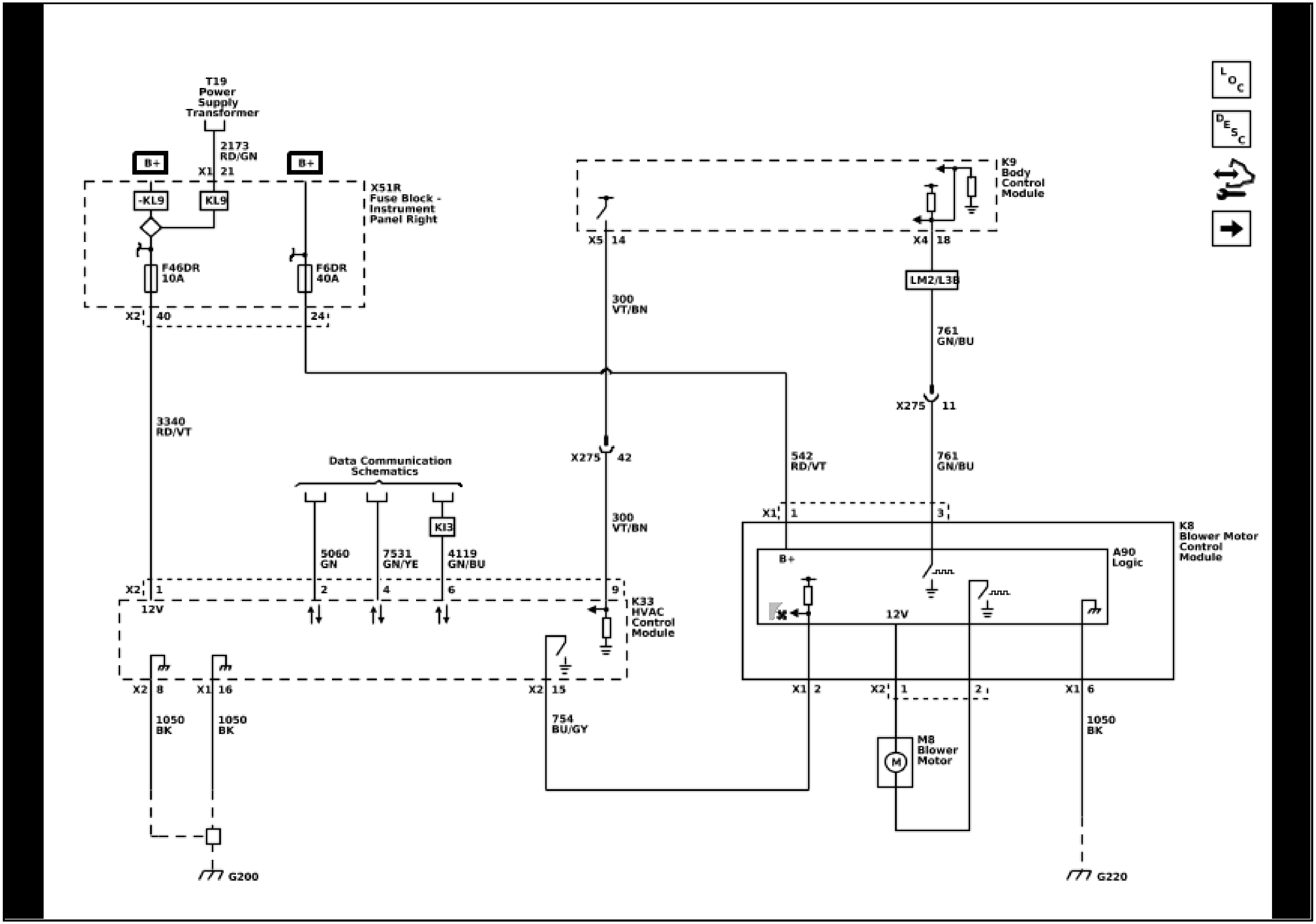
Vehicles equipped with R-1234yf may utilize an integral heat exchanger in the air conditioning line set. An integral heat exchanger transfers heat between liquid line and the suction line. It uses the cold vapor from the evaporator to cool the warm liquid refrigerant before it enters the TXV, resulting in increased cooling and higher efficiency.

The conditioned air is distributed through the HVAC module for passenger comfort. The moisture removed from the passenger compartment will also change form, or condense, and is discharged from the HVAC module as water.

HVAC - Automatic

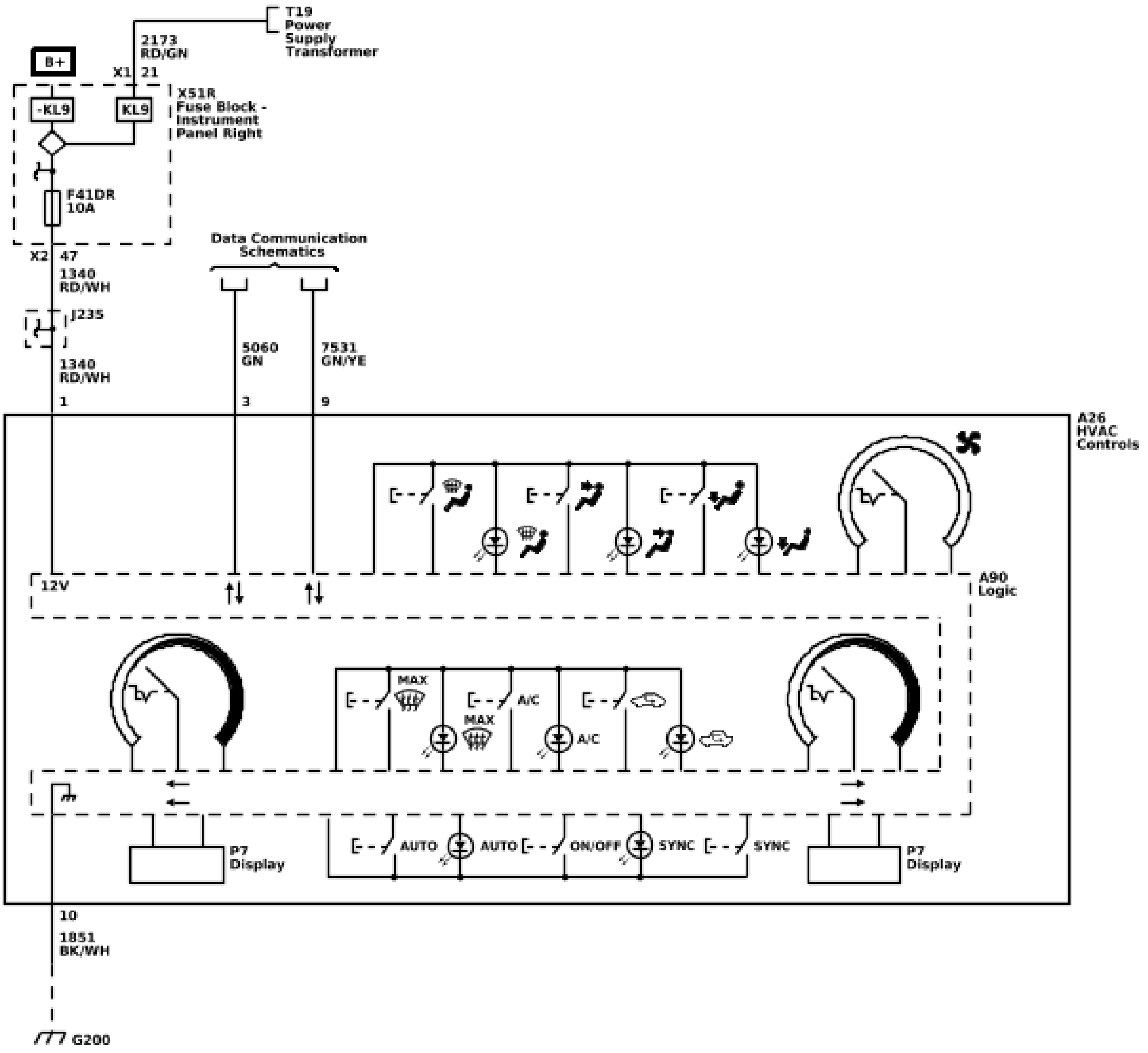
Schematic and Routing Diagrams

HVAC Schematics (HVAC Module Power, Ground, Serial Data, and Blower Motor)


T19
Power
Supply
Transformer
2173
RD/GN
X1 21
B+
-KL9
KL9
B+
X51R
Fuse Block -
Instrument
Panel Right
F46DR
10A
F6DR
40A
X2 40
24
3340
RD/VT
X5 14
300
VT/BN
X275 42
300
VT/BN
K9
Body
Control
Module
X4 18
LM2/L3B
761
GN/BU
X275 11
761
GN/BU
542
RD/VT
Data Communication
Schematics
KI3
5060
GN
7531
GN/YE
4119
GN/BU
X2 1
12V
2
4
6
9
K33
HVAC
Control
Module
X2 8
X1 16
X2 15
1050
BK
1050
BK
754
BU/GY
G200
X1 1
3
K8
Blower Motor
Control
Module
A90
Logic
B+
12V
X1 2
X2 1
2
X1 6
M
M8
Blower
Motor
1050
BK
G220

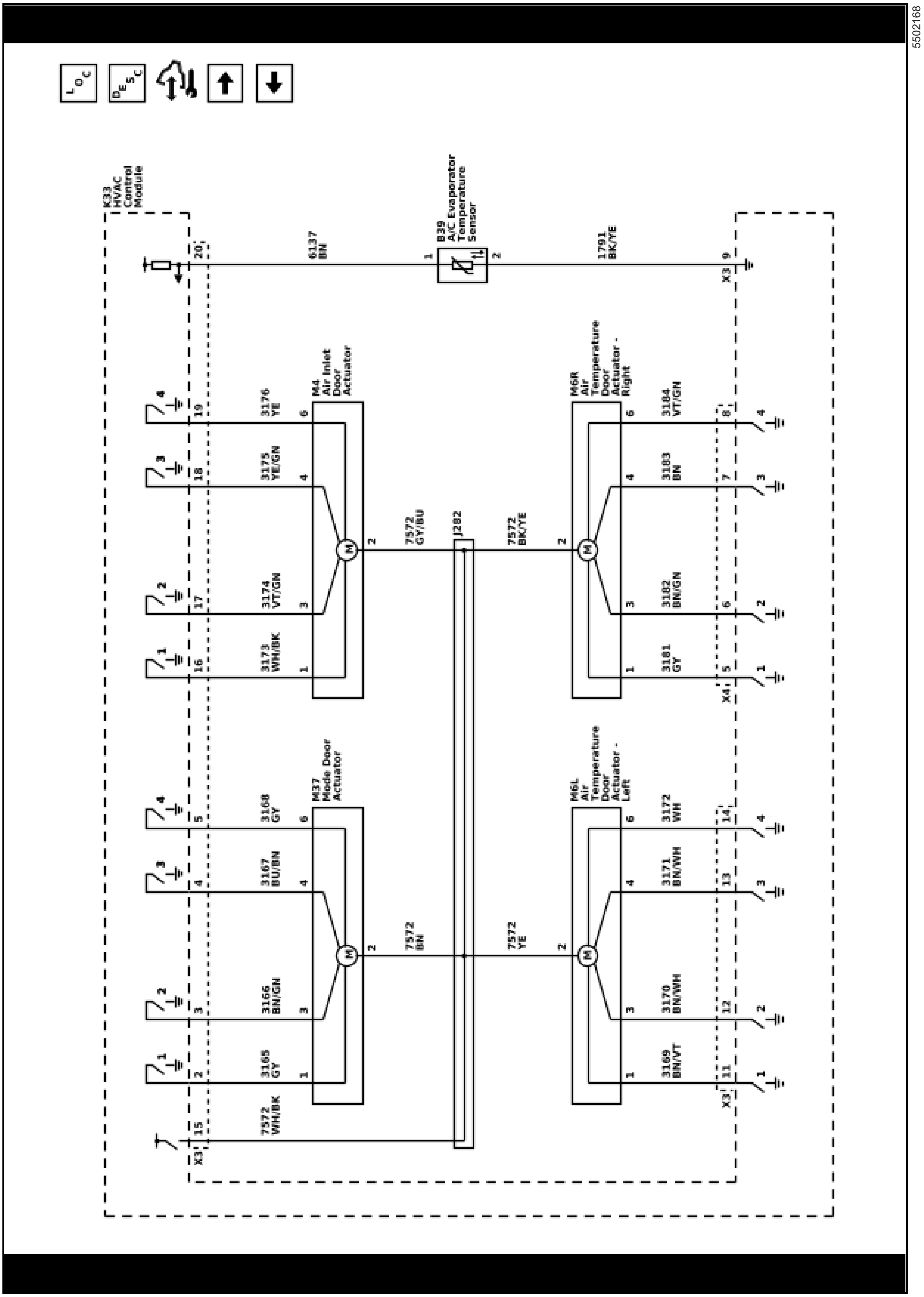
5502166

HVAC Schematics (HVAC Controls)

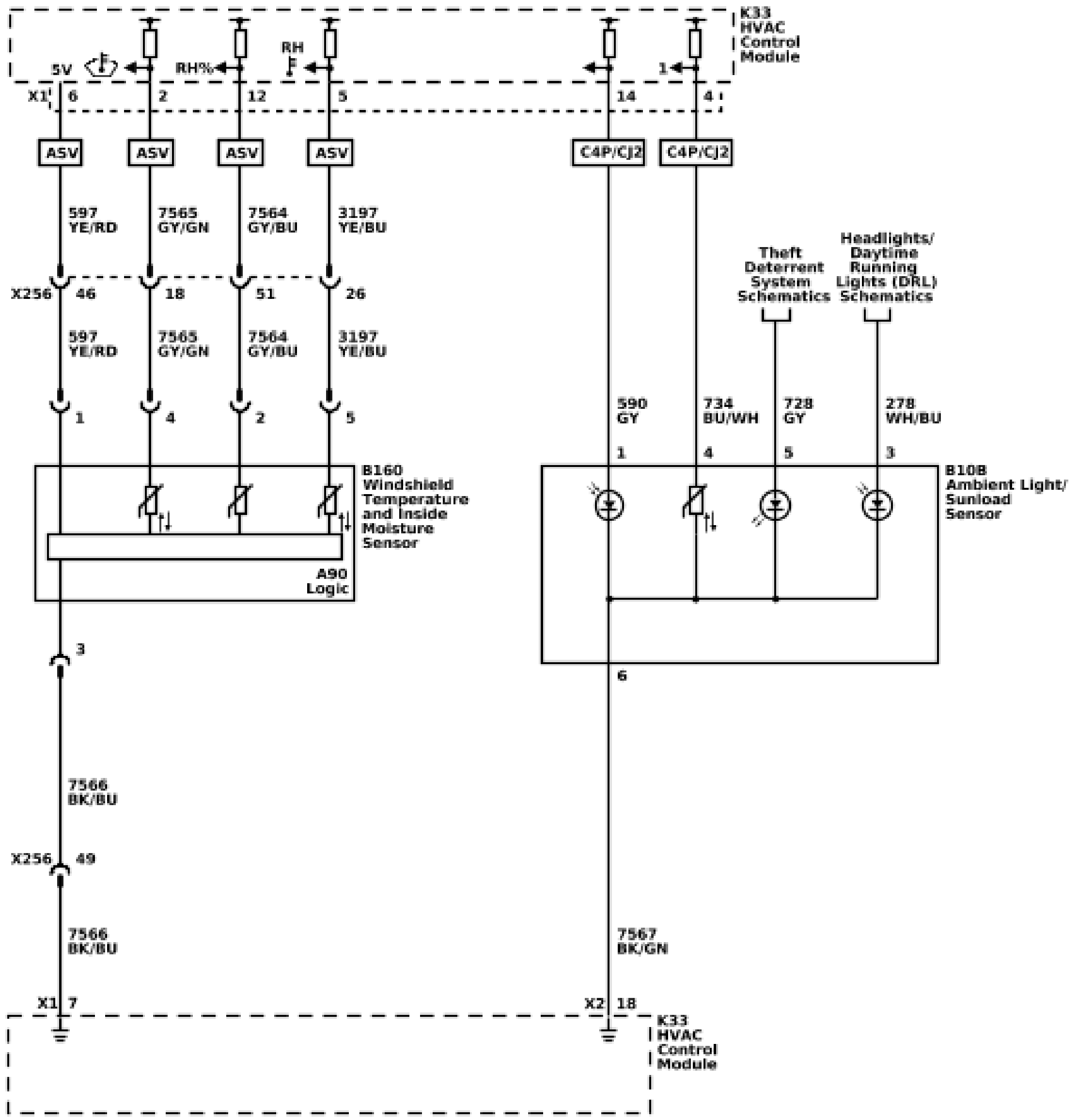

T19
Power
Supply
Transformer
2173
RD/GN
X1 21
B+
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F41DR
10A
X2 47
1340
RD/WH
J235
1340
RD/WH
1
Data Communication
Schematics
5060
GN
3
7531
GN/YE
9
A26
HVAC
Controls
12V
A90
Logic
MAX
A/C
MAX
A/C
AUTO
AUTO
ON/OFF
SYNC
SYNC
P7
Display
P7
Display
10
1851
BK/WH
G200

5502167

HVAC Schematics (Temperature and Mode)

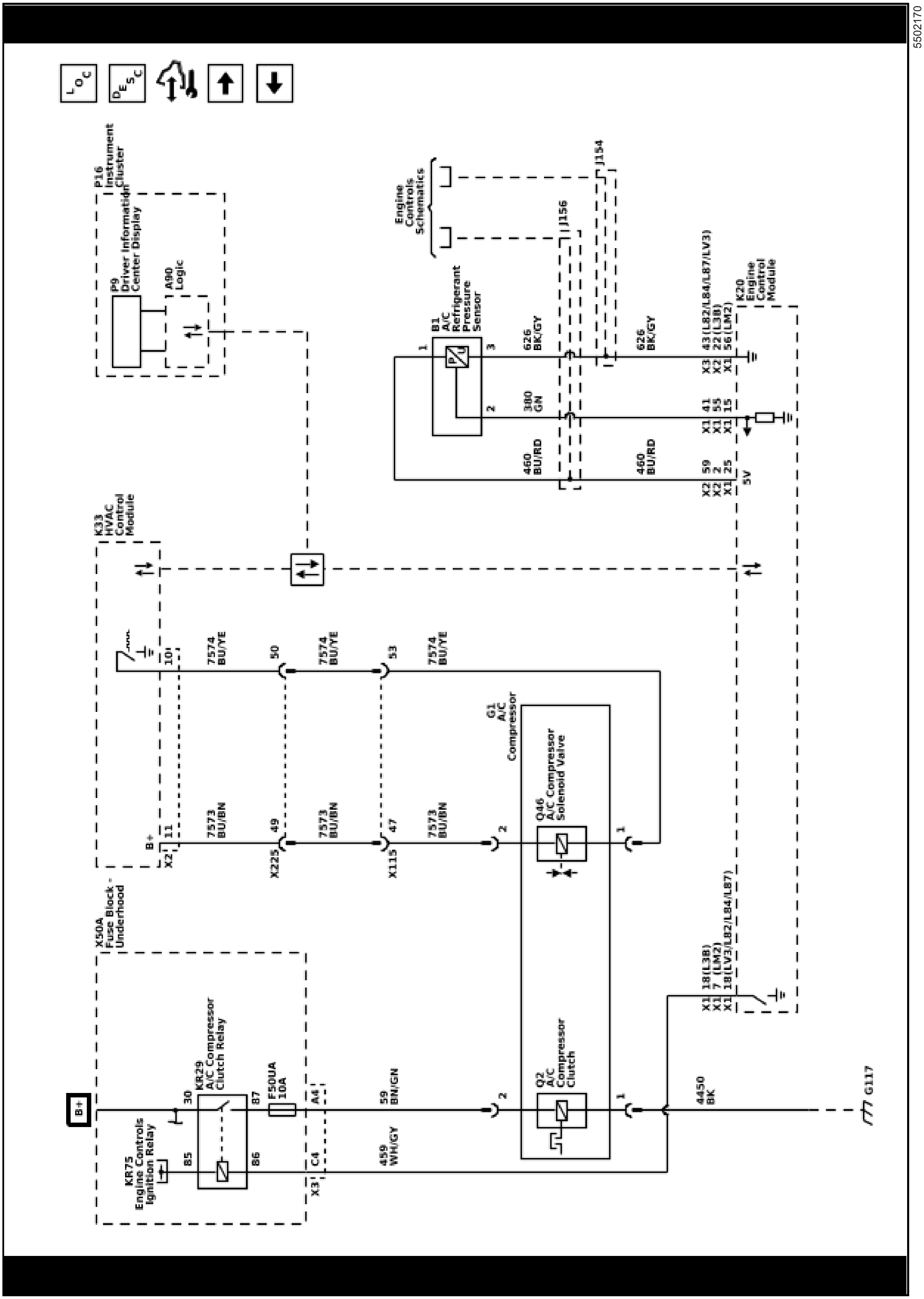

5502168
K33 HVAC Control Module
B39 A/C Evaporator Temperature Sensor
20
6137 BN
1
2
1791 BK/YE
X3 9
M4 Air Inlet Door Actuator
19 3176 YE 6
18 3175 YE/GN 4
17 3174 VT/GN 3
16 3173 WH/BK 1
2 7572 GY/BU
J282
7572 BK/YE 2
M6R Air Temperature Door Actuator - Right
6 3184 VT/GN 8
4 3183 BN 7
3 3182 BN/GN 6
1 3181 GY 5 X4
M37 Mode Door Actuator
5 3168 GY 6
4 3167 BU/BN 4
3 3166 BN/GN 3
2 3165 GY 1
X3 15 7572 WH/BK
2 7572 BN
7572 YE 2
M6L Air Temperature Door Actuator - Left
6 3172 WH 14
4 3171 BN/WH 13
3 3170 BN/WH 12
1 3169 BN/VT 11 X3
1
2
3
4
M

HVAC Schematics (Windshield and Sunload Sensors (ASV/C4P/CJ2))

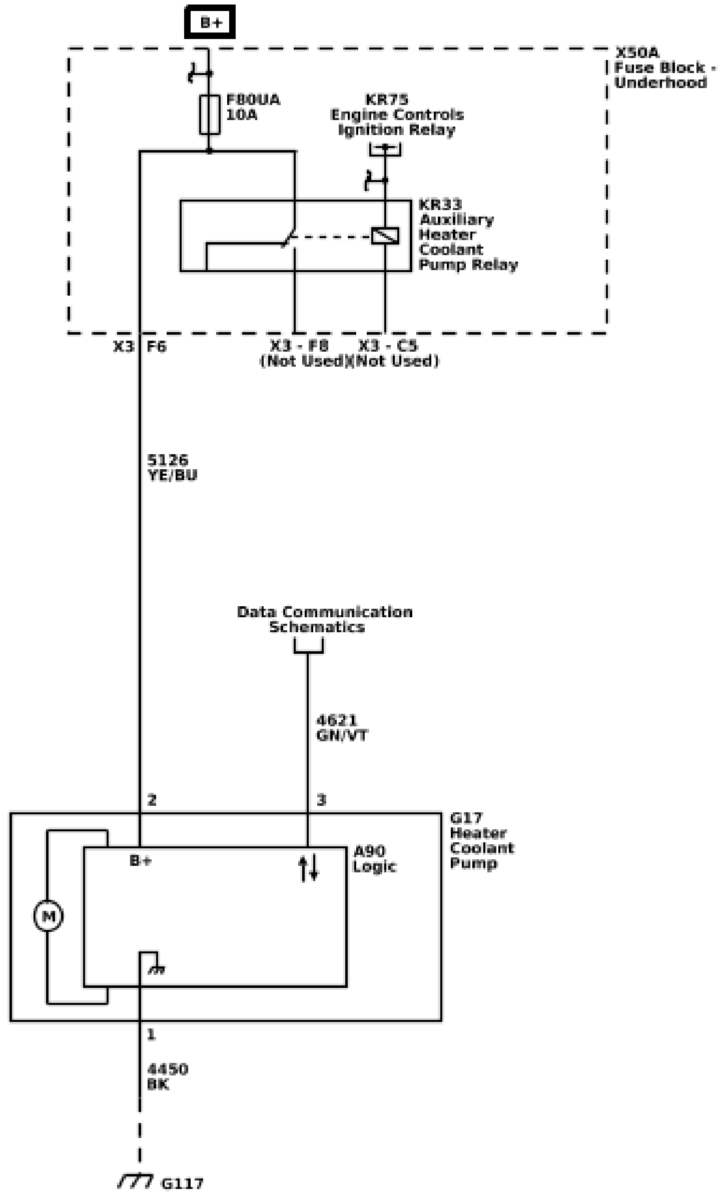

K33 HVAC Control Module
5V
RH%
RH
1
X1
6
2
12
5
14
4
ASV
ASV
ASV
ASV
C4P/CJ2
C4P/CJ2
597 YE/RD
7565 GY/GN
7564 GY/BU
3197 YE/BU
X256
46
18
51
26
597 YE/RD
7565 GY/GN
7564 GY/BU
3197 YE/BU
1
4
2
5
Theft Deterrent System Schematics
Headlights/ Daytime Running Lights (DRL) Schematics
590 GY
734 BU/WH
728 GY
278 WH/BU
1
4
5
3
B160 Windshield Temperature and Inside Moisture Sensor
A90 Logic
B10B Ambient Light/ Sunload Sensor
3
6
7566 BK/BU
X256
49
7566 BK/BU
7567 BK/GN
X1
7
X2
18
K33 HVAC Control Module

5502169

HVAC Schematics (A/C Compressor Controls)

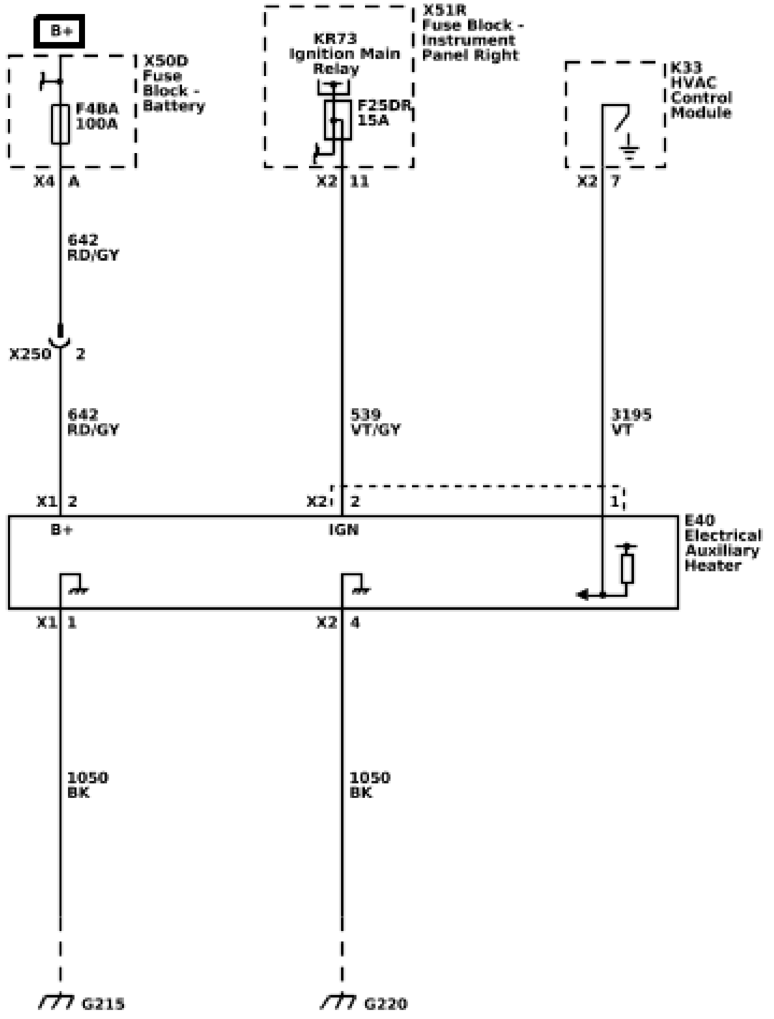

5502170
P16 Instrument Cluster
P9 Driver Information Center Display
A90 Logic
Engine Controls Schematics
J154
J156
B1 A/C Refrigerant Pressure Sensor
1
2
3
626 BK/GY
380 GN
460 BU/RD
X3 43 (L82/L84/L87/LV3)
X2 22 (L3B)
X1 56 (LM2)
X1 41
X1 55
X1 15
X2 59
X2 2
X1 25
5V
K20 Engine Control Module
K33 HVAC Control Module
B+
X2 11
10
7574 BU/YE
7573 BU/BN
X225 49 50
X115 47 53
G1 A/C Compressor
Q46 A/C Compressor Solenoid Valve
X50A Fuse Block - Underhood
B+
KR75 Engine Controls Ignition Relay
KR29 A/C Compressor Clutch Relay
30
85
86
87
F50UA 10A
X3 A4 C4
59 BN/GN
459 WH/GY
Q2 A/C Compressor Clutch
4450 BK
G117
X1 18 (L3B)
X1 7 (LM2)
X1 18 (LV3/L82/L84/L87)

HVAC Schematics (Heater Coolant Pump (L84/L87/LM2))


B+
X50A
Fuse Block - Underhood
F80UA
10A
KR75
Engine Controls Ignition Relay
KR33
Auxiliary Heater Coolant Pump Relay
X3 F6
X3 - F8
(Not Used)
X3 - C5
(Not Used)
5126
YE/BU
Data Communication Schematics
4621
GN/VT
2
3
G17
Heater Coolant Pump
A90
Logic
B+
M
1
4450
BK
G117

5502171

HVAC Schematics (Auxiliary Heater (C32))


B+
X50D
Fuse
Block -
Battery
F4BA
100A
X4 A
642
RD/GY
X250 2
642
RD/GY
X1 2
B+
X1 1
1050
BK
G215
KR73
Ignition Main
Relay
X51R
Fuse Block -
Instrument
Panel Right
F25DR
15A
X2 11
539
VT/GY
X2 2
IGN
X2 4
1050
BK
G220
K33
HVAC
Control
Module
X2 7
3195
VT
1
E40
Electrical
Auxiliary
Heater

5502172

Description and Operation

Automatic HVAC Description and Operation

The air temperature and the air delivery description and operation are divided into eight areas:

- HVAC Control Components
- Air Speed
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Automatic Operation
- Engine Coolant and A/C System Refrigerant

HVAC Control Components

HVAC Controls

The HVAC controls contains all switches, buttons, and dials which are required to control the functions of the HVAC system and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, temperature, right temperature (CJ2), and recirculation.

Each actuator used in the system is a 5-wire stepper motor. The HVAC control module supplies a 12 V reference voltage to the stepper motor and energizes the 4 stepper motor coils with a pulsed ground signal. The stepper motor moves the associated air control door into the calculated position in order to reach the selected position. The null point of the stepper motor will be calibrated, if the stepper motor is new. When the stepper motor is calibrated, the HVAC control module can drive the applicable coil to reach exactly the desired position of the air control door.

Blower Motor and Control Module

The blower motor control module varies the speed of the blower motor by varying the voltage to the motor. A battery voltage circuit, ground circuit, and speed request signal circuit from the HVAC control module allow the blower motor control module to operate. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor control module to request a specific motor speed. The blower motor control module translates the PWM signal and drives the motor accordingly.

The blower motor control module has a signal wire used to output a speed signal. The signal is monitored by the BCM, and the value is sent to the ECM via serial data. The ECM monitors the blower motor speed to modify the total commanded engine coolant flow rate, which is a percentage of available coolant flow sent to the heater core for occupant comfort and windshield defrosting. When the HVAC Blower Speed is determined to be zero, the ECM disables the heater core coolant flow to optimize engine coolant flow for fuel economy and emissions.

Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature coefficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed near the evaporator core to measure the air temperature exiting the core.

Based on vehicle operating conditions and operator settings, the HVAC software algorithms will determine a target evaporator air temperature. The operation of the compressor solenoid will be adjusted as needed to quickly reach and maintain the targeted temperature.

A/C Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2–4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

A/C Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the HVAC control module sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is pressed, the HVAC control module grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

Ambient Light/Sunload Sensor

The sunload sensor is connected to ground and to a 12 V clocked power supply through the HVAC control module. This clocked power supply is to power the sensor electronics and to work as a clock generator to the sunload sensor micro controller. The sensor uses a pulse signal for data identification and transferring the sun intensity measurement. At each positive transition from the clocked supply input, the sunload sensor micro controller will shift channels enabling new intensity measurement on the signal output to the HVAC control module. The signal voltage varies between 0–4 V.

The passenger compartment temperature sensor is a negative temperature co-efficient thermistor. A signal and low reference circuit enables the sensor to operate. As the air temperature increases, the sensor resistance decreases. The sensor signal varies between 0–5 V.

Bright or high intensity light causes the vehicles interior temperature to increase. The HVAC system compensates for the increased temperature by diverting additional cool air into the vehicle.

Windshield Temperature and Inside Moisture Sensor

The windshield temperature and inside moisture sensor includes the relative humidity sensor, windshield temperature sensor and humidity sensing element temperature sensor all in one assembly.

This sensor assembly provides information about:

- Relative humidity level at the windshield inside the vehicle
- Temperature of the windshield inside the vehicle
- Temperature of the humidity sensor element

Air Speed

The blower control switch is part of the HVAC controls. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor control module to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF under certain conditions. This reduces the amount of microbial growth that can create undesirable odors. For additional information on afterblow, the default setting, and changing the setting, refer to Afterblow Configuration.

Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode door actuator. The modes that may be selected are:

- Defrost
- Defog
- Panel
- Floor

The desired air distribution mode can be selected with the air distribution switches at the HVAC control. The HVAC control delivers the values to the HVAC control module via LIN-Bus. The HVAC control module controls the mode door actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

The rear window defogger does not affect the HVAC system.

Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

When the A/C switch is pressed, the HVAC controls sends a signal to the HVAC control module via LIN-Bus. The HVAC control module evaluates this signal and sends an A/C request signal to the ECM via CAN-Bus. The ECM checks all preconditions before releasing and if all conditions are met sends a release signal back to the HVAC control module. The ECM will provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor clutch will be activated. The performance of the A/C compressor is regulated via a variable A/C compressor solenoid valve. The HVAC control module supplies battery voltage to the A/C compressor. When the A/C switch is pressed, the HVAC control module provides a pulse width modulation (PWM) signal to the A/C compressor solenoid valve in order to command the performance of the A/C compressor.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM
- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load

- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air door to direct the airflow. If the interior temperature should be increased, the mixed air door is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air door is put into the position in which more air streams through the evaporator core.

Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake using the recirculation actuator. In recirculation mode the recirculation door is positioned to block outside air from entering and circulate the air within the vehicle. In outside air mode the recirculation door is positioned to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator positions the recirculation door so that outside air is circulated to the windshield to reduce fogging.

In automatic mode the values of the sensors are used as inputs for the HVAC control module to calculate the fog risk on passenger compartment side of the windshield. The A/C compressor and the defrost mode may activated to prevent or remove fog on the passenger compartment side of the windshield.

Automatic Operation

In automatic operation, the HVAC control module maintains the comfort level inside of the vehicle by controlling the A/C compressor clutch, the blower motor, the air temperature actuators, mode actuator and recirculation actuator.

To put the HVAC system in automatic mode, the following is required:

1. The auto switch must be activated.
2. The air temperature switch must not be in either the full hot or full cold position.

Once the desired temperature is reached, the blower motor, mode, recirculation and temperature actuators automatically adjust to maintain the temperature selected. The HVAC control module performs the following functions to maintain the desired air temperature:

- Monitors the following sensors:
  - Ambient air temperature sensor
  - Ambient light/sunload sensor
  - Windshield temperature and inside moisture sensor
- Regulate the blower motor speed
- Position the air temperature actuators
- Position the mode door actuator
- Position the recirculation actuator
- Request A/C operation
- Control of the A/C compressor

When the warmest position is selected in automatic operation the blower speed will increase gradually until the vehicle reaches normal operating temperature. When normal operating temperature is reached the blower stays on high speed and the air temperature actuators stays in the full heat position.

When the coldest position is selected in automatic operation the blower stays on high and the air temperature actuators stay in full cold position. The mode actuator remains in the panel position and the recirculation actuator will remain in the recirculation position.

Under cold ambient temperatures, the automatic HVAC system provides heat in the most efficient manner. The operator can select an extreme temperature setting but the system will not warm the vehicle any faster. Under warm ambient temperatures, the automatic HVAC system also provides air conditioning in the most efficient manner. Selecting an extreme cool temperature will not cool the vehicle any faster.

Auxiliary Heater Coolant Pump

The primary purpose of the auxiliary coolant pump is to circulate engine coolant through the HVAC heater core when heat is required in the cabin for comfort. This normally happens when the vehicle is in an Auto Stop and the mechanical pump is not operating. If conditions exist that require coolant circulation to maintain cabin temperature, the engine control module will turn the pump ON. The engine control module controls the auxiliary coolant pump relay via the relay control circuit. The heater core coolant pump relay supplies voltage to the auxiliary coolant pump.

Electric Auxiliary Heater (C32)

Some models are equipped with an auxiliary electric heater to assist in warming the passenger compartment when the engine coolant has not sufficiently warmed to operating temperature. The heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The HVAC control module will activate it when the outside temperature is less than approximately 8°C (46°F), the engine coolant temperature is less than approximately 75°C (167°F), and the temperature blend door is commanded to the full hot position.

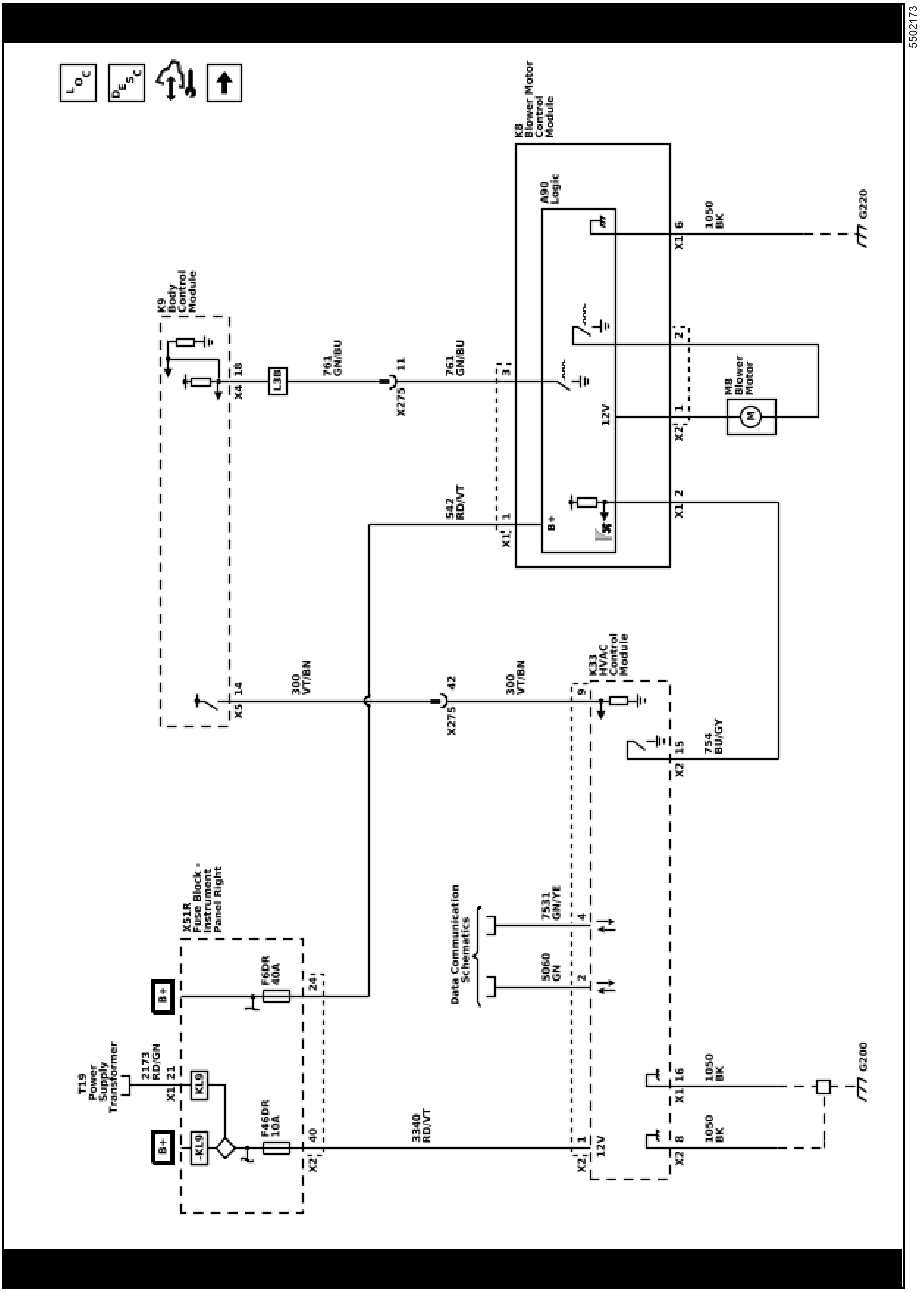
Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to *Heating and Air Conditioning System Description and Operation on page 6-3*.

HVAC - Manual

Schematic and Routing Diagrams

HVAC Schematics (C4P/C67) (HVAC Module Power, Ground, Serial Data, and Blower Motor)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LOC
DESC
T19 Power Supply Transformer
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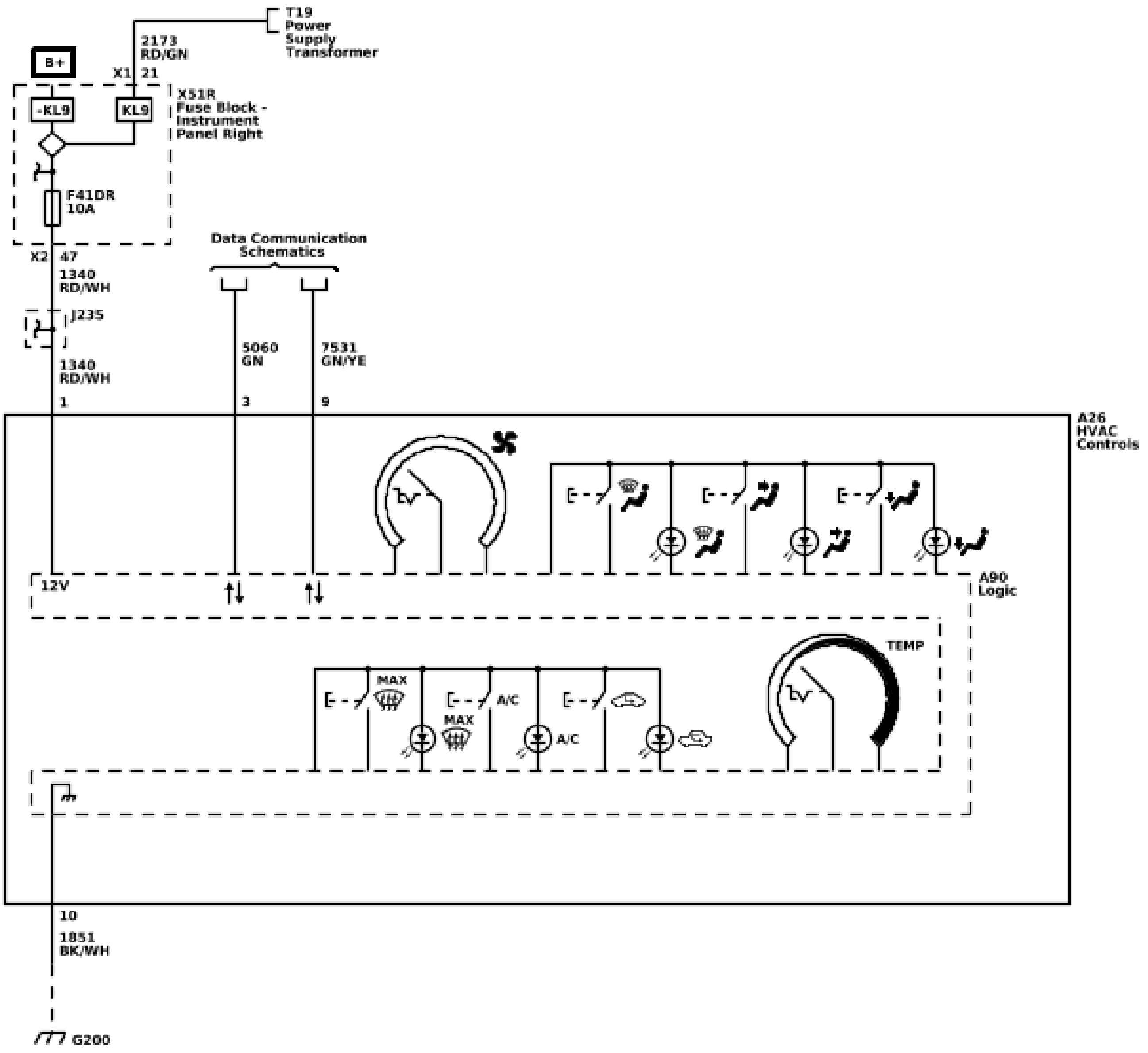
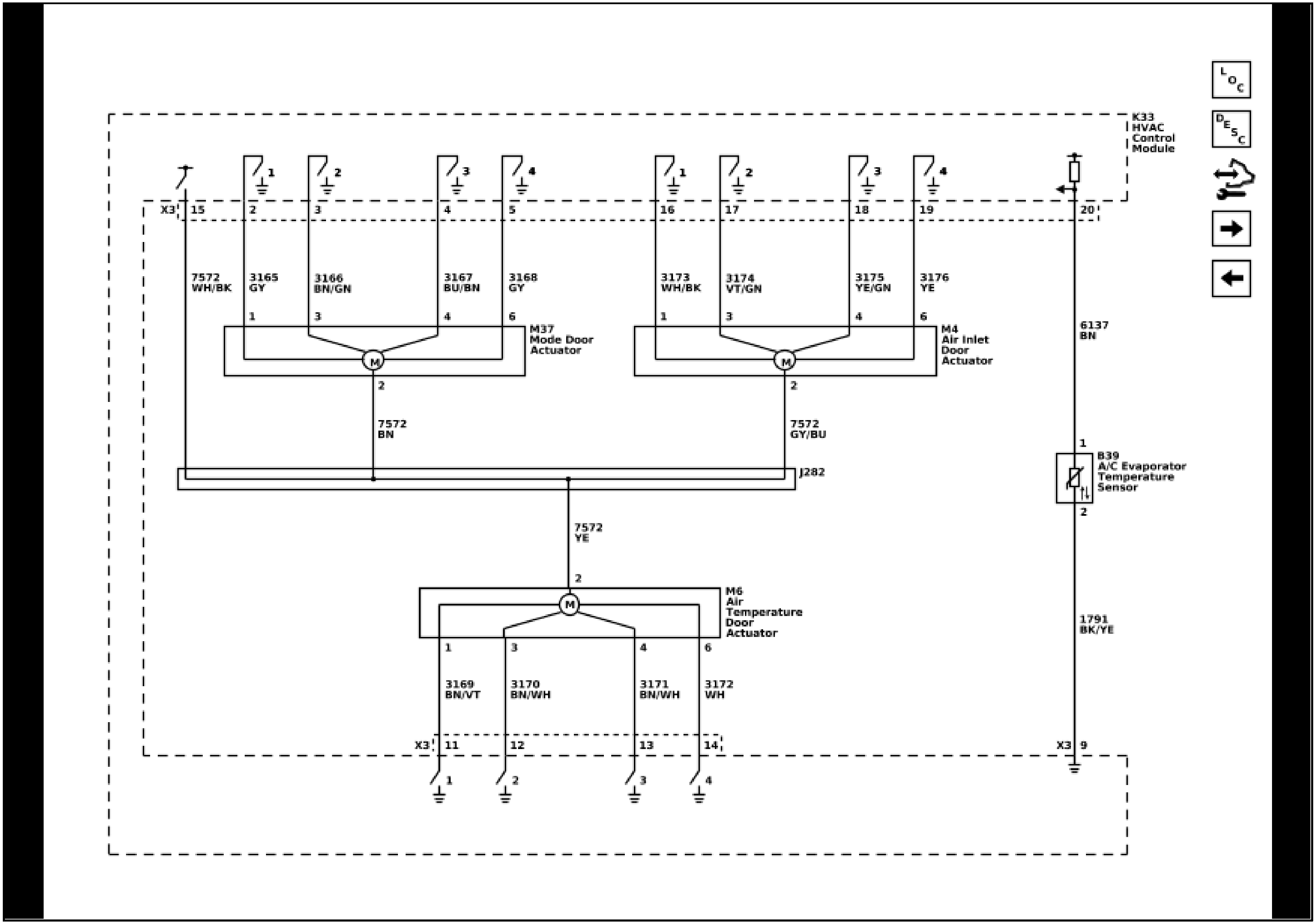
X1 21
KL9
-KL9
B+
B+
X51R Fuse Block - Instrument Panel Right
F46DR 10A
F6DR 40A
X2 40
24
3340 RD/VT
542 RD/VT
K9 Body Control Module
X4 18
L38
761 GN/BU
X275 11
761 GN/BU
X5 14
300 VT/BN
X275 42
300 VT/BN
Data Communication Schematics
5060 GN
7531 GN/YE
K33 HVAC Control Module
X2 1
12V
2
4
9
X2 15
754 BU/GY
X1 16
1050 BK
X2 8
1050 BK
G200
K8 Blower Motor Control Module
A90 Logic
X1 1
B+
3
X1 2
X2 1
12V
2
X1 6
1050 BK
G220
M8 Blower Motor
M

HVAC Schematics (C4P/C67) (HVAC Controls)


T19
Power
Supply
Transformer
2173
RD/GN
X1 21
B+
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F41DR
10A
X2 47
1340
RD/WH
J235
1340
RD/WH
1
Data Communication
Schematics
5060
GN
3
7531
GN/YE
9
A26
HVAC
Controls
12V
A90
Logic
MAX
MAX
A/C
A/C
TEMP
10
1851
BK/WH
G200

5502174

HVAC Schematics (C4P/C67) (Temperature and Mode)


K33
HVAC
Control
Module
X3
15
2
3
4
5
16
17
18
19
20
1
2
3
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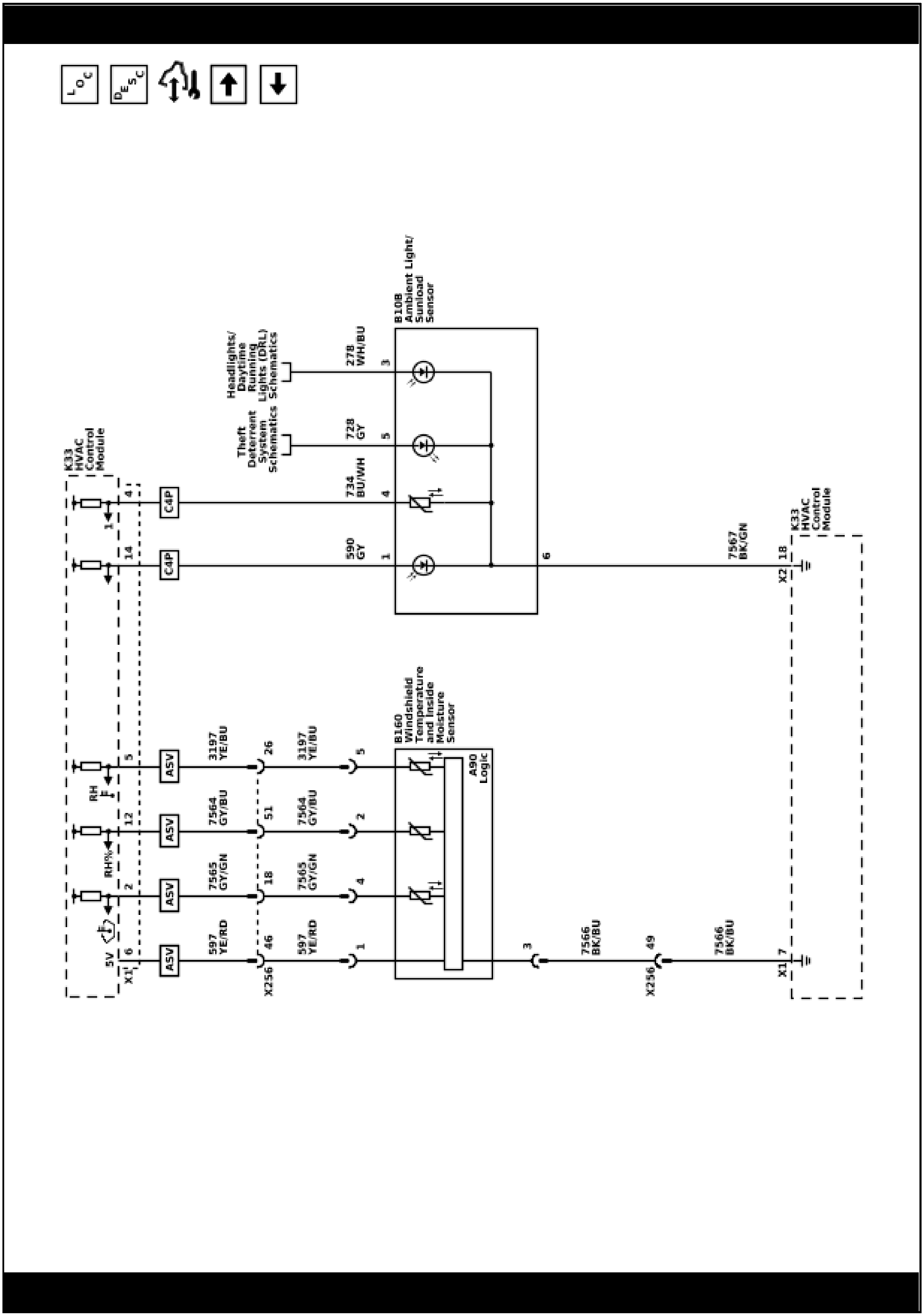
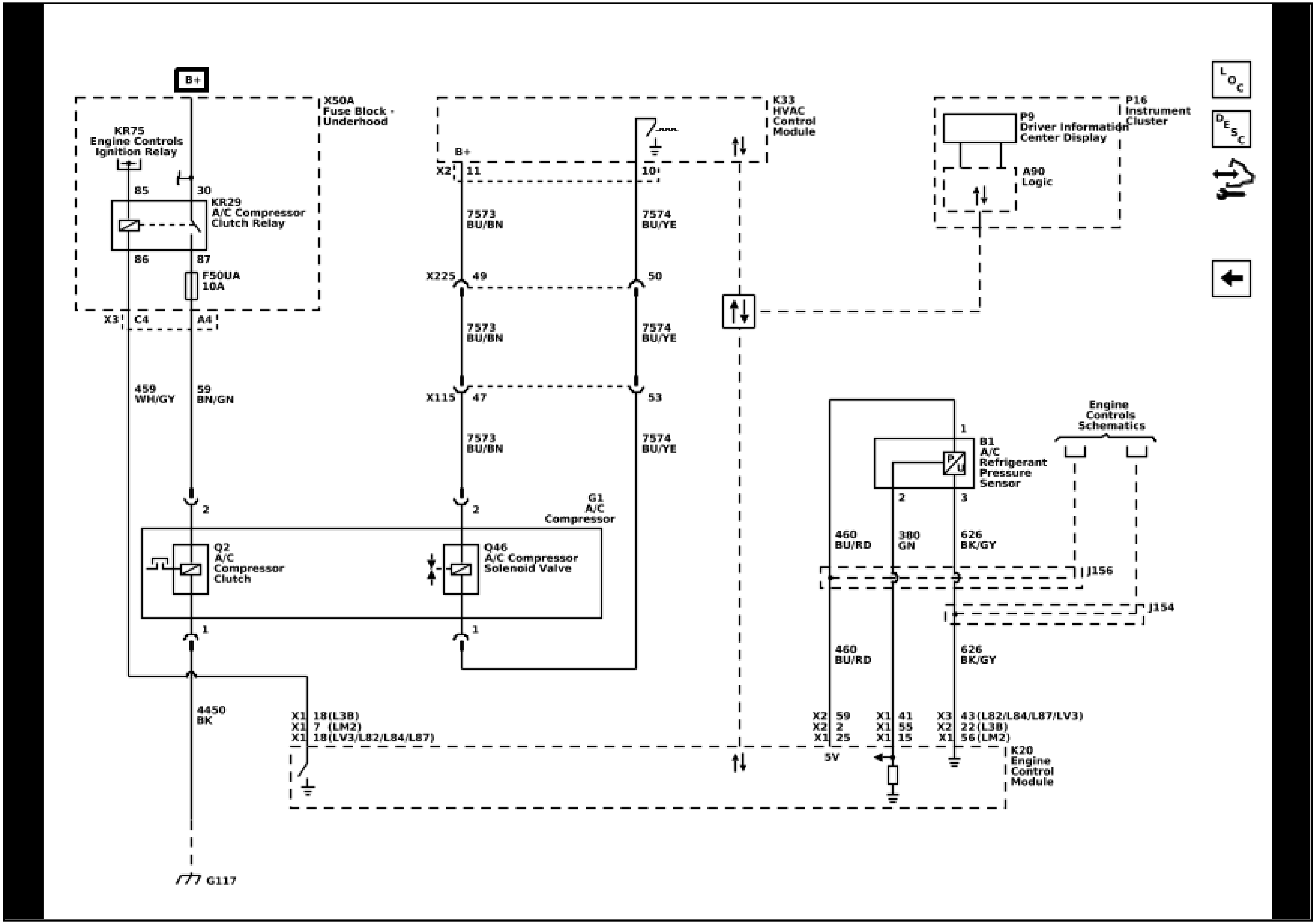
7572
WH/BK
3165
GY
3166
BN/GN
3167
BU/BN
3168
GY
3173
WH/BK
3174
VT/GN
3175
YE/GN
3176
YE
M37
Mode Door
Actuator
M4
Air Inlet
Door
Actuator
M
7572
BN
7572
GY/BU
6137
BN
J282
B39
A/C Evaporator
Temperature
Sensor
7572
YE
M6
Air
Temperature
Door
Actuator
3169
BN/VT
3170
BN/WH
3171
BN/WH
3172
WH
1791
BK/YE
X3
11
12
13
14
X3
9
5502175

HVAC Schematics (C4P/C67) (Windshield and Sunload Sensors (ASV/C4P))

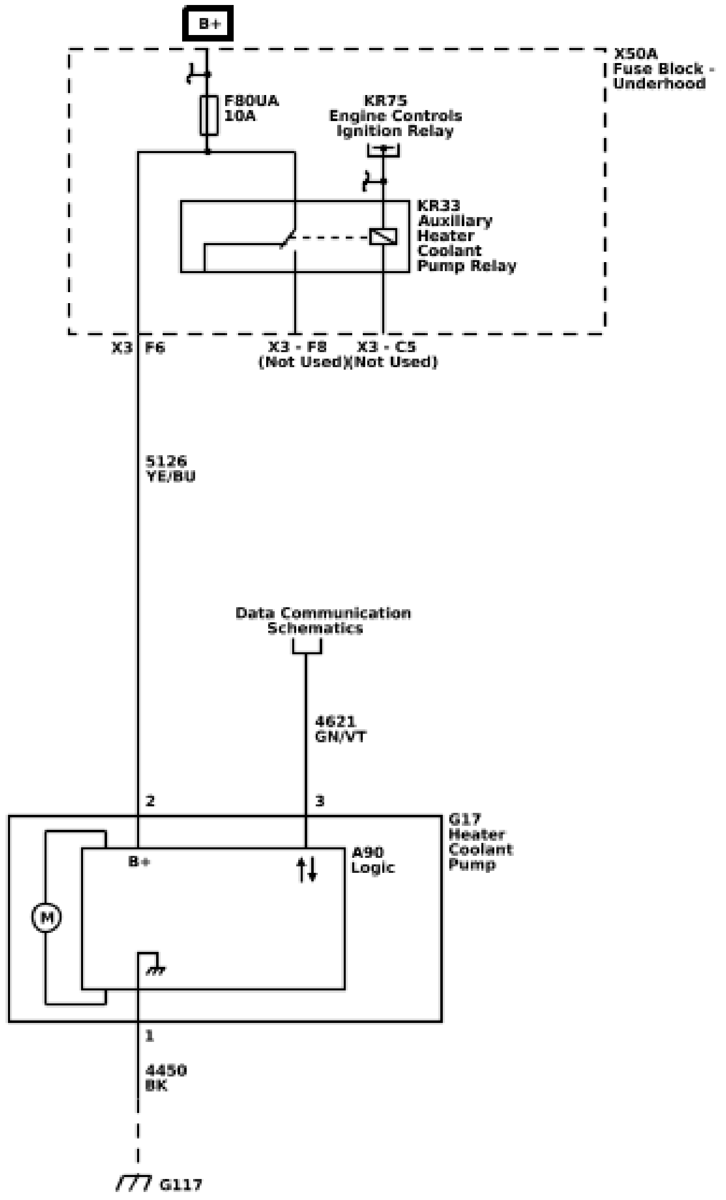

5502176
K33 HVAC Control Module
5V
X1
6
2
12
5
RH%
RH
14
4
ASV
C4P
597 YE/RD
7565 GY/GN
7564 GY/BU
3197 YE/BU
590 GY
734 BU/WH
728 GY
278 WH/BU
X256
46
18
51
26
1
4
2
5
3
Theft Deterrent System Schematics
Headlights/ Daytime Running Lights (DRL) Schematics
B108 Ambient Light/ Sunload Sensor
B160 Windshield Temperature and Inside Moisture Sensor
A90 Logic
7566 BK/BU
49
7567 BK/GN
X2 18
X1 7
K33 HVAC Control Module

HVAC Schematics (C4P/C67) (A/C Compressor Controls)


B+
X50A Fuse Block - Underhood
KR75 Engine Controls Ignition Relay
85
30
KR29 A/C Compressor Clutch Relay
86
87
F50UA 10A
X3 C4
A4
459 WH/GY
59 BN/GN
2
Q2 A/C Compressor Clutch
1
4450 BK
G117
K33 HVAC Control Module
B+
X2 11
10
7573 BU/BN
7574 BU/YE
X225 49
50
X115 47
53
G1 A/C Compressor
Q46 A/C Compressor Solenoid Valve
X1 18(L3B)
X1 7 (LM2)
X1 18(LV3/L82/L84/L87)
P16 Instrument Cluster
P9 Driver Information Center Display
A90 Logic
Engine Controls Schematics
1
B1 A/C Refrigerant Pressure Sensor
2
3
460 BU/RD
380 GN
626 BK/GY
J156
J154
X2 59
X2 2
X1 25
X1 41
X1 55
X1 15
X3 43(L82/L84/L87/LV3)
X2 22(L3B)
X1 56(LM2)
5V
K20 Engine Control Module

5502177

HVAC Schematics (C4P/C67) (Heater Coolant Pump (L82/L84/LM2))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X50A
Fuse Block - Underhood
F80UA
10A
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Engine Controls Ignition Relay
KR33
Auxiliary Heater Coolant Pump Relay
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X3 - F8
(Not Used)
X3 - C5
(Not Used)
5126
YE/BU
Data Communication Schematics
4621
GN/VT
2
3
G17
Heater Coolant Pump
B+
A90
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M
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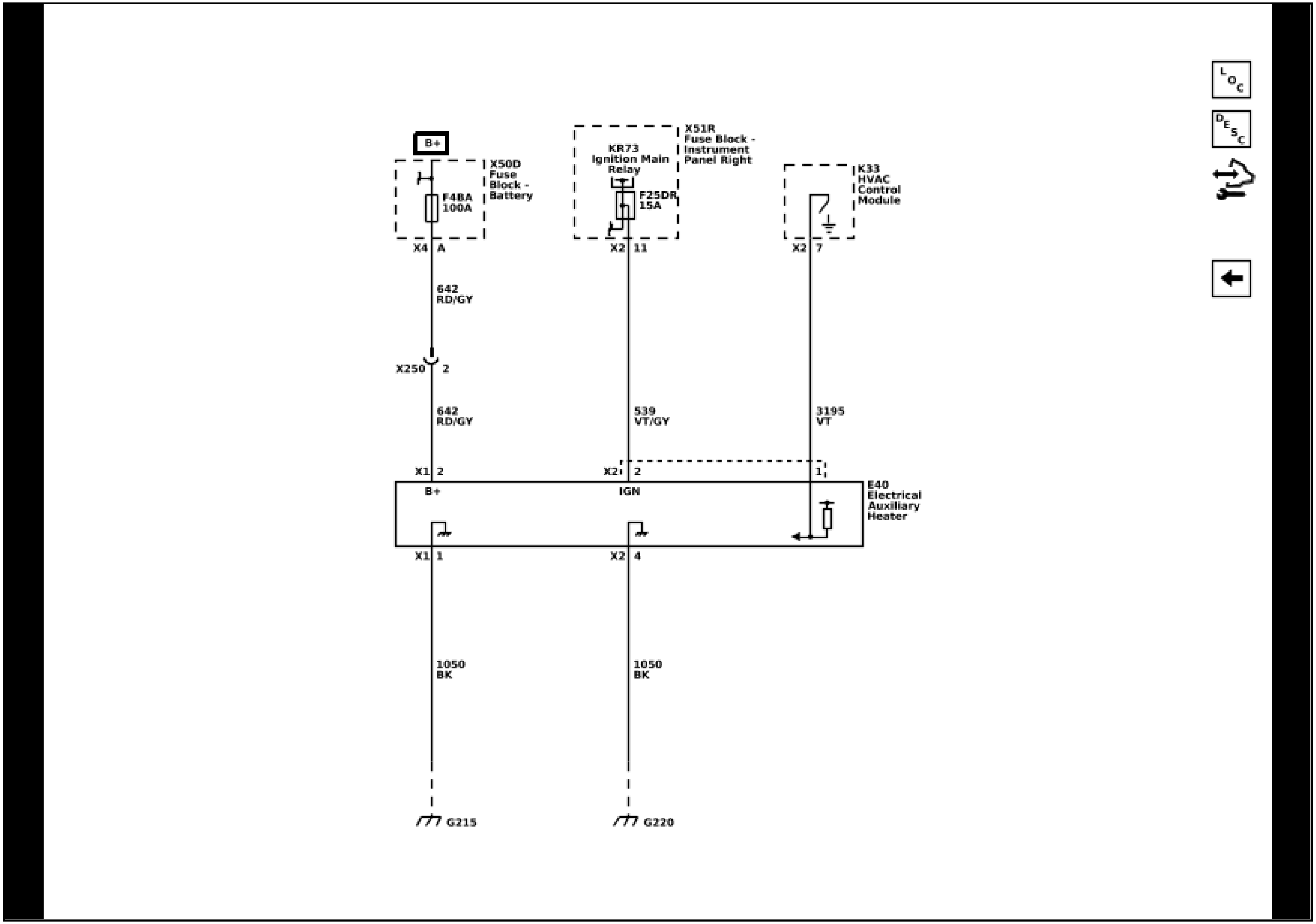
BK
G117

5502178

HVAC Schematics (C4P/C67) (Auxiliary Heater (C32))


B+
X50D
Fuse
Block -
Battery
F4BA
100A
X4 A
642
RD/GY
X250 2
642
RD/GY
X1 2
B+
X1 1
1050
BK
G215
X51R
Fuse Block -
Instrument
Panel Right
KR73
Ignition Main
Relay
F25DR
15A
X2 11
539
VT/GY
X2 2
IGN
X2 4
1050
BK
G220
K33
HVAC
Control
Module
X2 7
3195
VT
1
E40
Electrical
Auxiliary
Heater
5502179

Description and Operation

Manual HVAC Description and Operation

The air temperature and the air delivery description and operation are divided into seven areas:

- HVAC Control Components
- Air Speed
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Engine Coolant and A/C System Refrigerant

HVAC Control Components

HVAC Controls

The HVAC controls contains all switches, buttons, and dials which are required to control the functions of the HVAC system and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, temperature, and recirculation.

Each actuator used in the system is a 5-wire stepper motor. The HVAC control module supplies a 12 V reference voltage to the stepper motor and energizes the 4 stepper motor coils with a pulsed ground signal. The stepper motor moves the associated air control door into the calculated position in order to reach the selected position. The null point of the stepper motor will be calibrated, if the stepper motor is new. When the stepper motor is calibrated, the HVAC control module can drive the applicable coil to reach exactly the desired position of the air control door.

Blower Motor and Control Module

The blower motor control module varies the speed of the blower motor by varying the voltage to the motor. A battery voltage circuit, ground circuit, and speed request signal circuit from the HVAC control module allow the blower motor control module to operate. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor control module to request a specific motor speed. The blower motor control module translates the PWM signal and drives the motor accordingly.

The blower motor control module has a signal wire used to output a speed signal. The signal is monitored by the BCM, and the value is sent to the ECM via serial data. The ECM monitors the blower motor speed to modify the total commanded engine coolant flow rate, which is a percentage of available coolant flow sent to the heater core for occupant comfort and windshield defrosting. When the HVAC Blower Speed is determined to be zero, the ECM disables the heater core coolant flow to optimize engine coolant flow for fuel economy and emissions.

Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature coefficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed near the evaporator core to measure the air temperature exiting the core.

Based on vehicle operating conditions and operator settings, the HVAC software algorithms will determine a target evaporator air temperature. The operation of the compressor solenoid will be adjusted as needed to quickly reach and maintain the targeted temperature.

A/C Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2–4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

A/C Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the HVAC control module sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is pressed, the HVAC control module grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

Air Speed

The blower control switch is part of the HVAC controls. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor control module to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF under certain conditions. This reduces the amount of microbial growth that can create undesirable odors. For additional information on afterblow, the default setting, and changing the setting, refer to Afterblow Configuration.

Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode actuator. The modes that may be selected are:

- Defrost
- Defog
- Panel
- Floor

The desired air distribution mode can be selected with the air distribution switches at the HVAC controls. The HVAC controls delivers the values to the HVAC control module via LIN-Bus. The HVAC control module controls the air distribution actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

The rear window defogger does not affect the HVAC system.

Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

When the A/C switch is pressed, the HVAC controls sends a signal to the HVAC control module via LIN-Bus. The HVAC control module evaluates this signal and sends an A/C request signal to the ECM via CAN-Bus. The ECM checks all preconditions before releasing and if all conditions are met sends a release signal back to the HVAC control module. The ECM will provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor clutch will be activated. The performance of the A/C compressor is regulated via a variable A/C compressor solenoid valve. The HVAC control module supplies battery voltage to the A/C compressor. When the A/C switch is pressed, the HVAC control module provides a pulse width modulation (PWM) signal to the A/C compressor solenoid valve in order to command the performance of the A/C compressor.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM
- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load
- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air door to induce the airflow. If the interior temperature should be increased, the mixed air door is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air door is put into the position in which more air streams through the evaporator core.

Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake using the recirculation actuator. In recirculation mode the recirculation door is positioned to block outside air from entering and circulate the air within the vehicle. In outside air mode the recirculation door is positioned to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator positions the recirculation door so that outside air is circulated to the windshield to reduce fogging.

Electric Auxiliary Heater

Some models are equipped with an auxiliary electric heater to assist in warming the passenger compartment when the engine coolant has not sufficiently warmed to operating temperature. The heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The HVAC control module will activate it when the outside temperature is less than approximately 8°C (46°F), the engine coolant temperature is less than approximately 75°C (167°F), and the temperature blend door is commanded to the full hot position.

Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to *Heating and Air Conditioning System Description and Operation on page 6-3*.

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Section 7

Power and Signal Distribution

Data Communications 7-3
  Schematic and Routing Diagrams 7-3
    Data Communication Schematics 7-4
    Body Control System Schematics 7-20
  Description and Operation 7-24
    Data Link Communications Description and Operation 7-24

Electrical Component and Inline Harness Connector End Views 7-29
  Component Locator 7-29
    Electrical Center Identification Views 7-29
    Component Connector End Views 7-92
    Inline Harness Connector End Views 7-768

Electrical Component Locator and Harness Routing Views 7-934
  Schematic and Routing Diagrams 7-934
    Harness Routing Views 7-934
  Component Locator 7-976
    Front of Vehicle/Engine Compartment Component Views 7-976
    Powertrain Component Views 7-987
    Instrument Panel/Center Console Component Views 7-1007
    Passenger Compartment/Roof Component Views 7-1013
    Door Component Views 7-1023
    Luggage Compartment/Rear of Vehicle Component Views 7-1030
    Wheels/Vehicle Underbody Component Views 7-1038
    Ground Views 7-1039

Power Outlets 7-1055
  Schematic and Routing Diagrams 7-1055
    Cigar Lighter/Power Outlet Schematics 7-1056
  Description and Operation 7-1063
    Mobile Device Wireless Charger Description and Operation 7-1063
    Power Outlets Description and Operation 7-1064

Wiring Systems and Power Management 7-1066
  Schematic and Routing Diagrams 7-1066
    Power Distribution Schematics 7-1067
    Power Moding Schematics 7-1097
    Ignition Lock Schematics 7-1102
    Ground Distribution Schematics 7-1103
    Upfitter Provision Schematics 7-1122
  Component Locator 7-1129
    Master Electrical Component List 7-1129
  Description and Operation 7-1217
    Power Mode Description and Operation (Without BTM and/or ATH/ATS) 7-1217
    Power Mode Description and Operation (BTM and/or ATH/ATS) 7-1219
    Retained Accessory Power Description and Operation 7-1222

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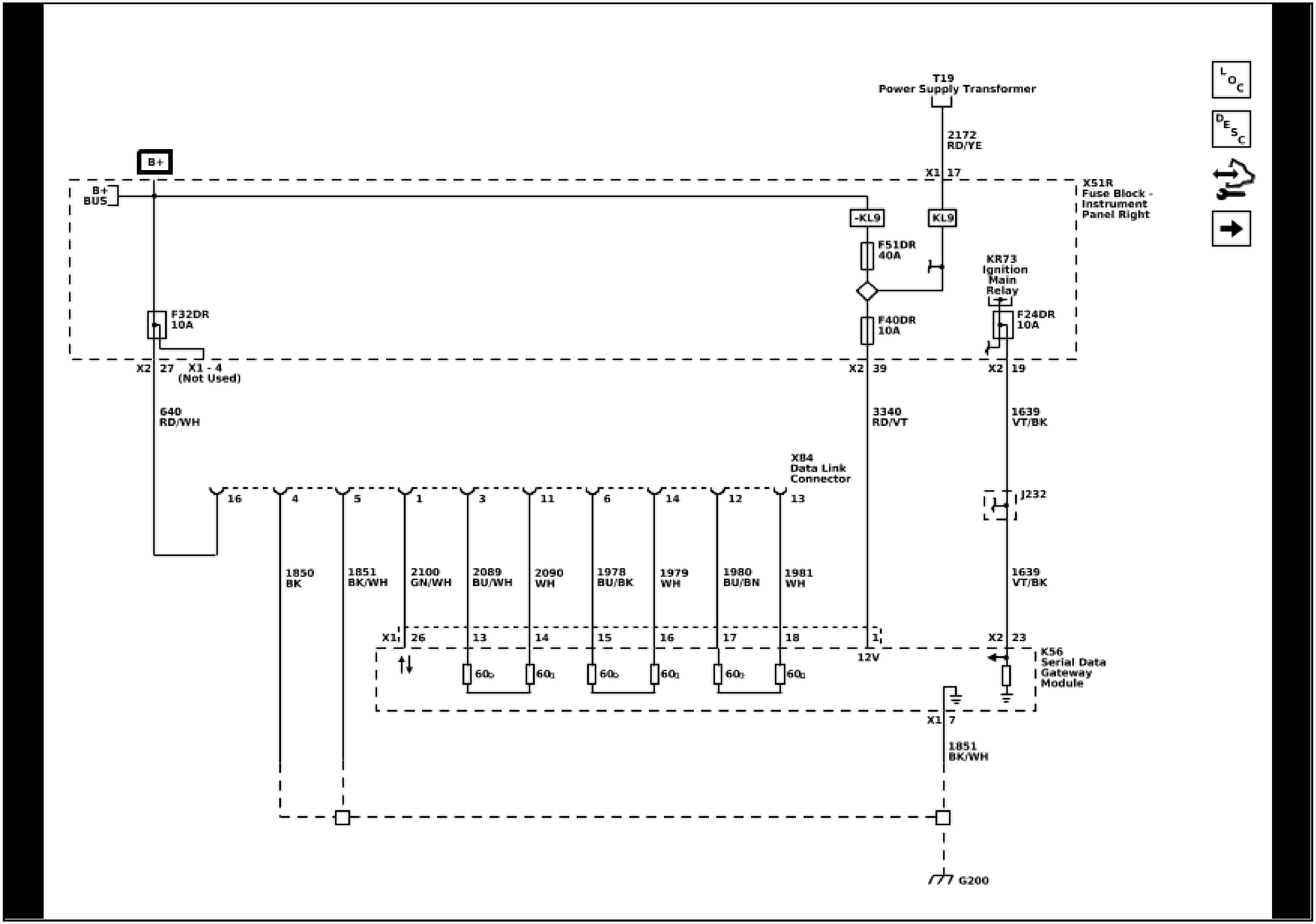
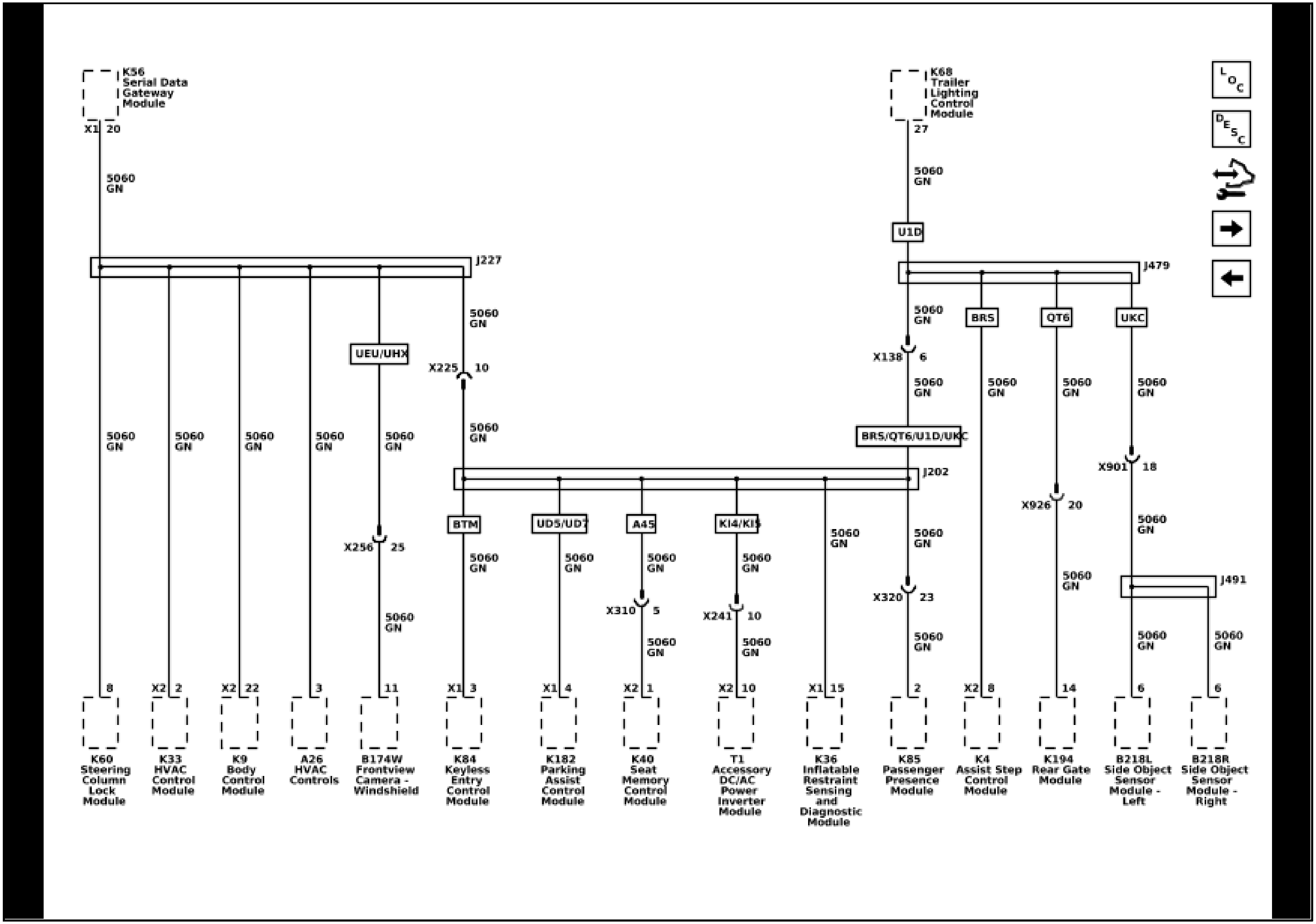
Data Communications

Schematic and Routing Diagrams

Data Communication Schematics (Data Link Connector and Serial Data Gateway Module Power and Ground)

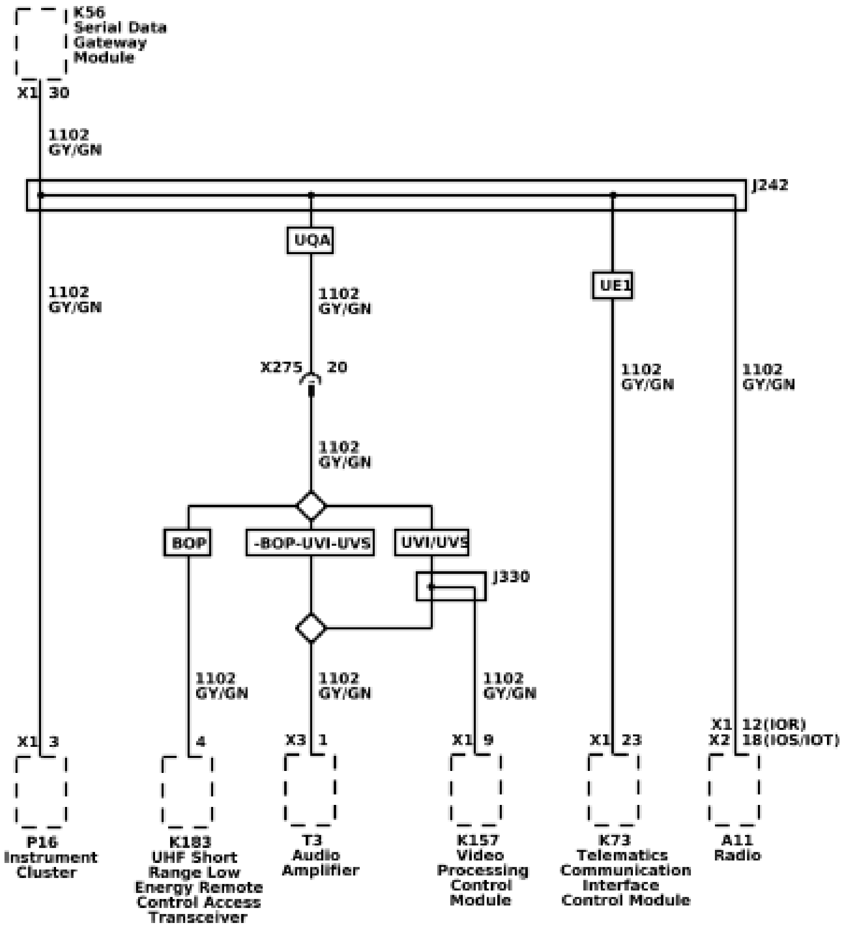

L O C
D E S C
T19
Power Supply Transformer
2172
RD/YE
X1 17
X51R
Fuse Block - Instrument Panel Right
B+
B+ BUS
-KL9
KL9
F51DR 40A
KR73 Ignition Main Relay
F32DR 10A
F40DR 10A
F24DR 10A
X2 27
X1 - 4 (Not Used)
X2 39
X2 19
640 RD/WH
3340 RD/VT
1639 VT/BK
X84 Data Link Connector
J232
16
4
5
1
3
11
6
14
12
13
1850 BK
1851 BK/WH
2100 GN/WH
2089 BU/WH
2090 WH
1978 BU/BK
1979 WH
1980 BU/BN
1981 WH
1639 VT/BK
X1 26
13
14
15
16
17
18
1
12V
X2 23
K56 Serial Data Gateway Module
60Ω
X1 7
1851 BK/WH
G200
5502180

Data Communication Schematics (Low Speed GMLAN)


K56 Serial Data Gateway Module
X1 20
5060 GN
J227
K68 Trailer Lighting Control Module
27
5060 GN
U1D
J479
BRS
QT6
UKC
X138 6
X225 10
UEU/UHX
BRS/QT6/U1D/UKC
J202
X901 18
X926 20
BTM
UD5/UD7
A45
KI4/KI5
X256 25
X310 5
X241 10
X320 23
J491
8
X2 2
X2 22
3
11
X1 3
X1 4
X2 1
X2 10
X1 15
2
X2 8
14
6
6
K60 Steering Column Lock Module
K33 HVAC Control Module
K9 Body Control Module
A26 HVAC Controls
B174W Frontview Camera - Windshield
K84 Keyless Entry Control Module
K182 Parking Assist Control Module
K40 Seat Memory Control Module
T1 Accessory DC/AC Power Inverter Module
K36 Inflatable Restraint Sensing and Diagnostic Module
K85 Passenger Presence Module
K4 Assist Step Control Module
K194 Rear Gate Module
B218L Side Object Sensor Module - Left
B218R Side Object Sensor Module - Right
L O C
D E S C

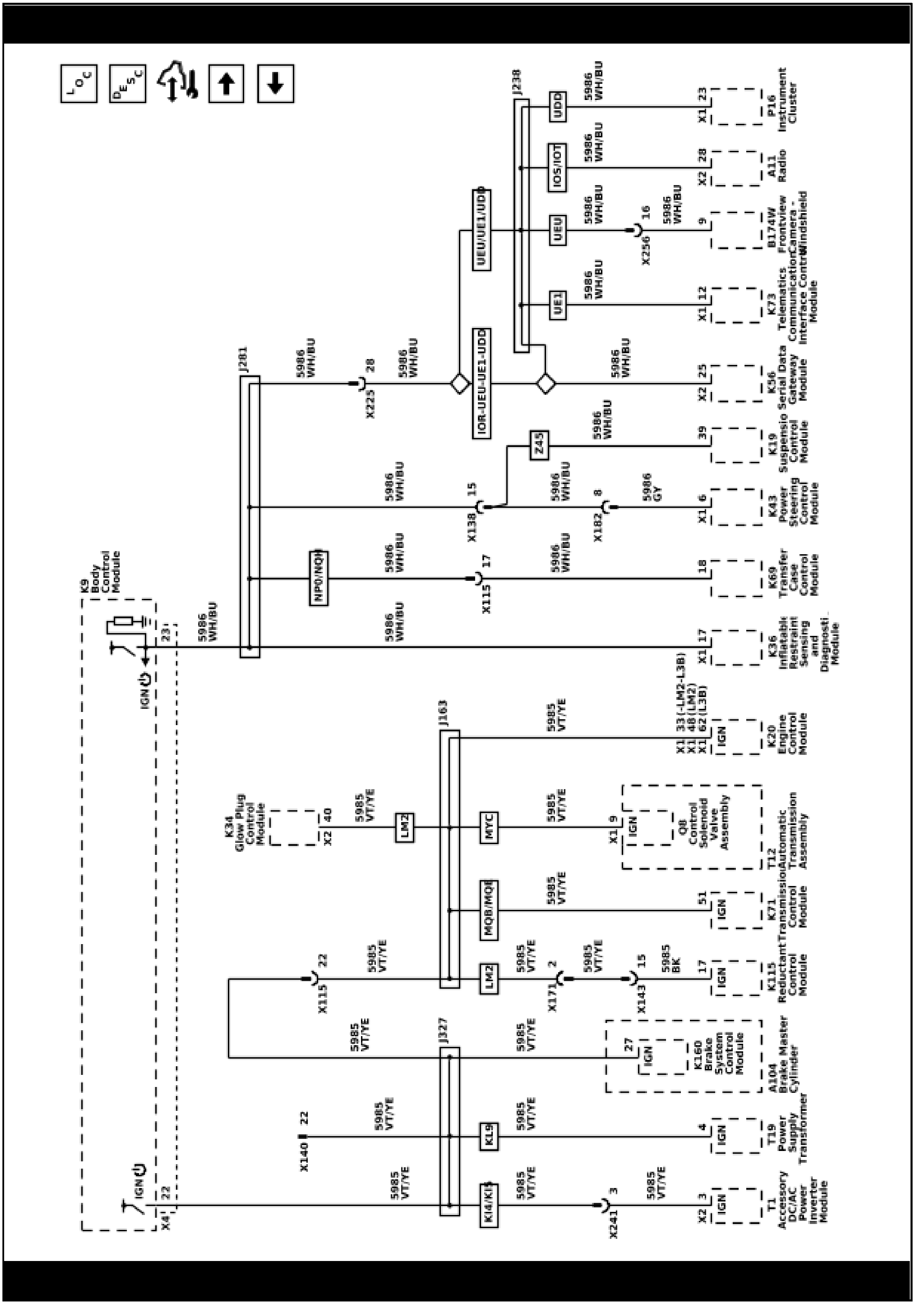
5502181

Data Communication Schematics (Gateway Isolated Low Speed GMLAN)

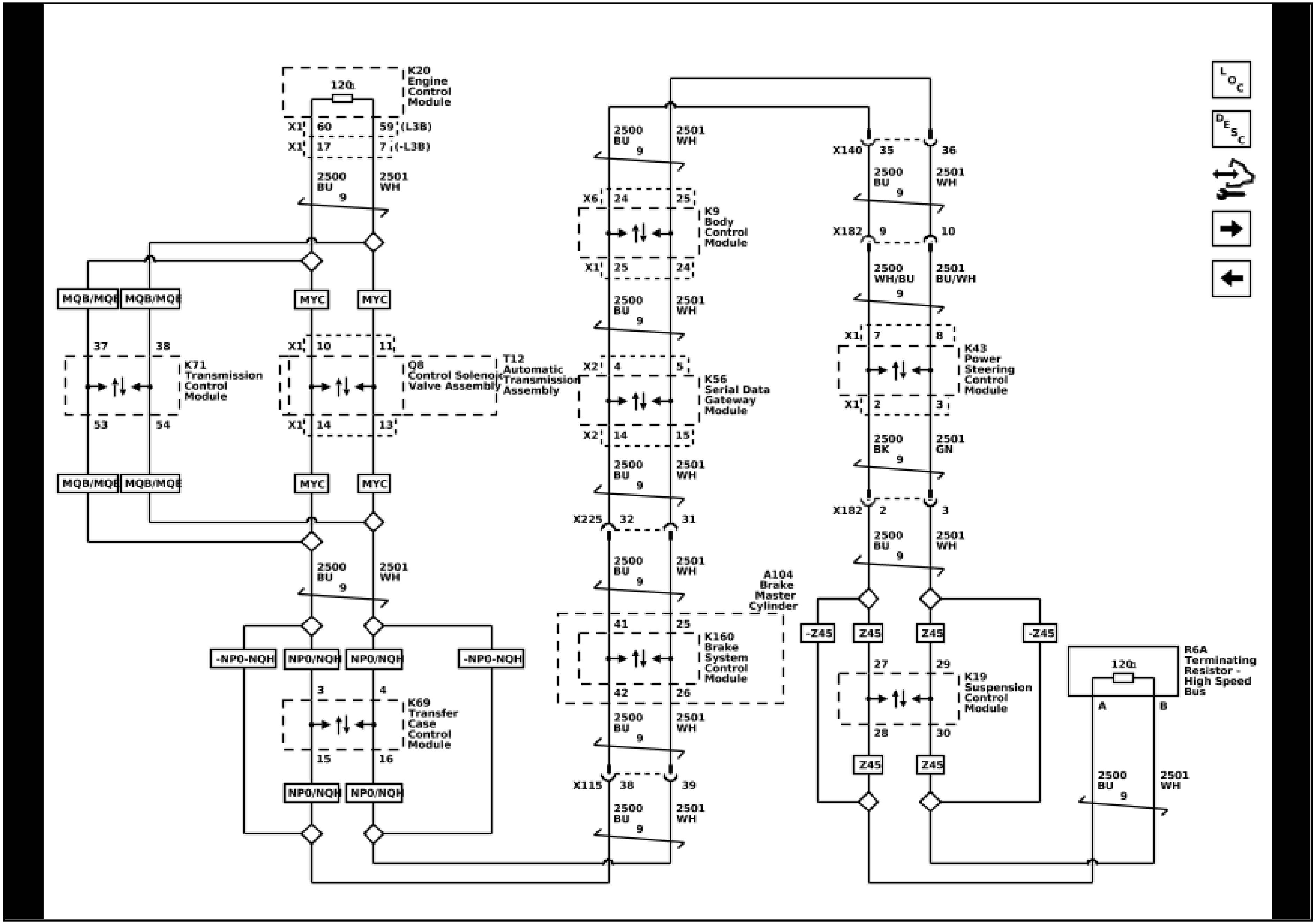

K56
Serial Data
Gateway
Module
X1 30
1102
GY/GN
J242
UQA
UE1
1102
GY/GN
1102
GY/GN
X275 20
1102
GY/GN
1102
GY/GN
1102
GY/GN
BOP
-BOP-UVI-UVS
UVI/UVS
J330
1102
GY/GN
1102
GY/GN
1102
GY/GN
X1 3
4
X3 1
X1 9
X1 23
X1 12(IOR)
X2 18(IOS/IOT)
P16
Instrument
Cluster
K183
UHF Short
Range Low
Energy Remote
Control Access
Transceiver
T3
Audio
Amplifier
K157
Video
Processing
Control
Module
K73
Telematics
Communication
Interface
Control Module
A11
Radio

5502182

Data Communication Schematics (Communications Enable - High Speed GMLAN)

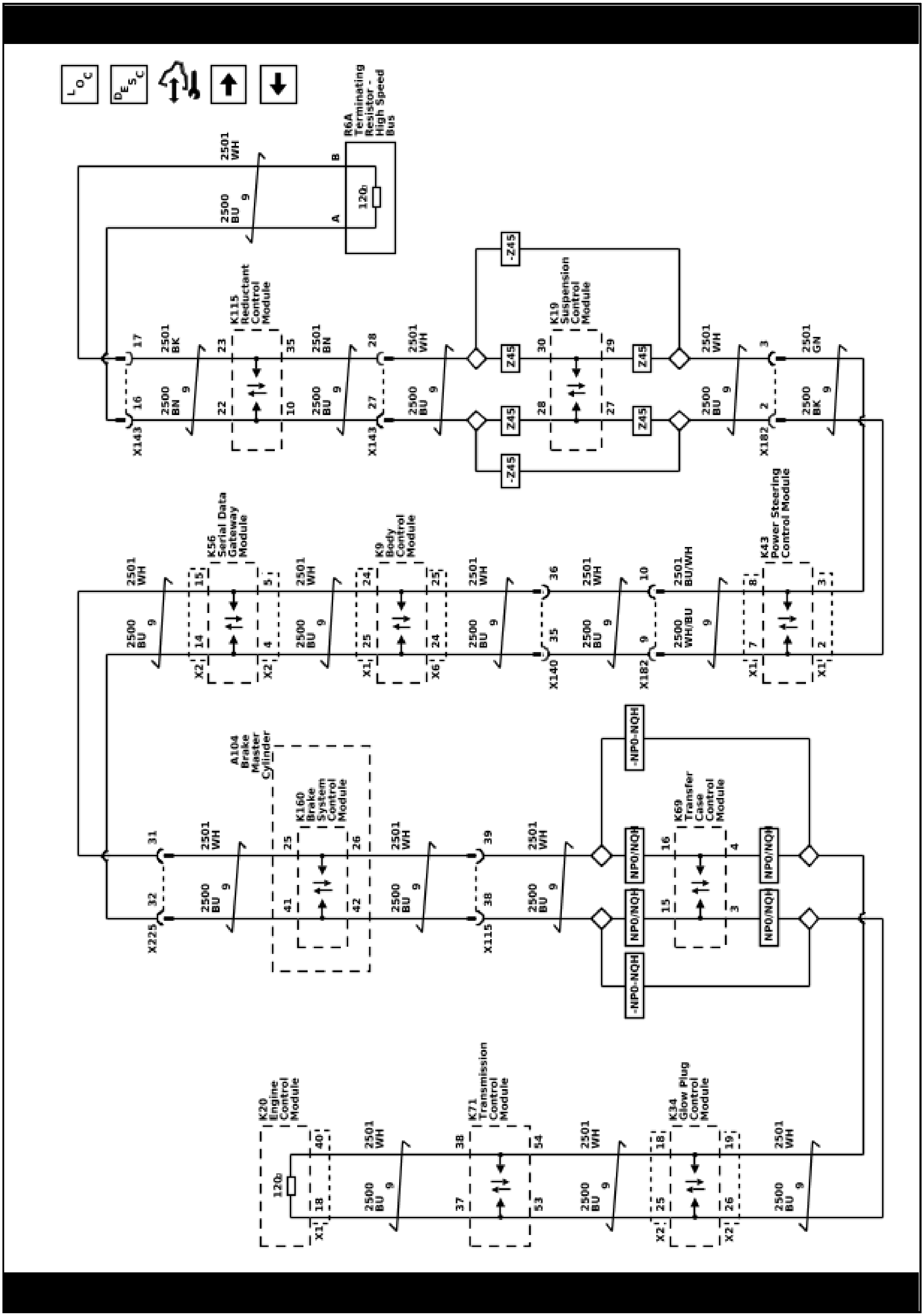

5502183
K9 Body Control Module
IGN
X4 22
23
5986 WH/BU
5985 VT/YE
5985 BK
5986 GY
J281
J238
J163
J327
X225 28
X138 15
X182 8
X115 17
X115 22
X140 22
X171 2
X143 15
X241 3
X256 16
Z45
NP0/NQH
IOR-UEU-UE1-UDD
UEU/UE1/UDD
UE1
UEU
IOS/IOT
UDD
LM2
MYC
MQB/MQE
KL9
KI4/KI5
P16 Instrument Cluster X1 23
A11 Radio X2 28
B174W Frontview Camera - Windshield 9
K73 Telematics Communication Interface Control Module X1 12
K56 Serial Data Gateway Module X2 25
K19 Suspension Control Module 39
K43 Power Steering Control Module X1 6
K69 Transfer Case Control Module 18
K36 Inflatable Restraint Sensing and Diagnostic Module X1 17
K20 Engine Control Module X1 33 (-LM2-L3B) X1 48 (LM2) X1 62 (L3B)
K34 Glow Plug Control Module X2 40
Q8 Control Solenoid Valve Assembly X1 9
T12 Automatic Transmission Assembly
K71 Transmission Control Module 51
K115 Reductant Control Module 17
K160 Brake System Control Module 27
A104 Brake Master Cylinder
T19 Power Supply Transformer 4
T1 Accessory DC/AC Power Inverter Module X2 3

Data Communication Schematics (High Speed GMLAN (-LM2))

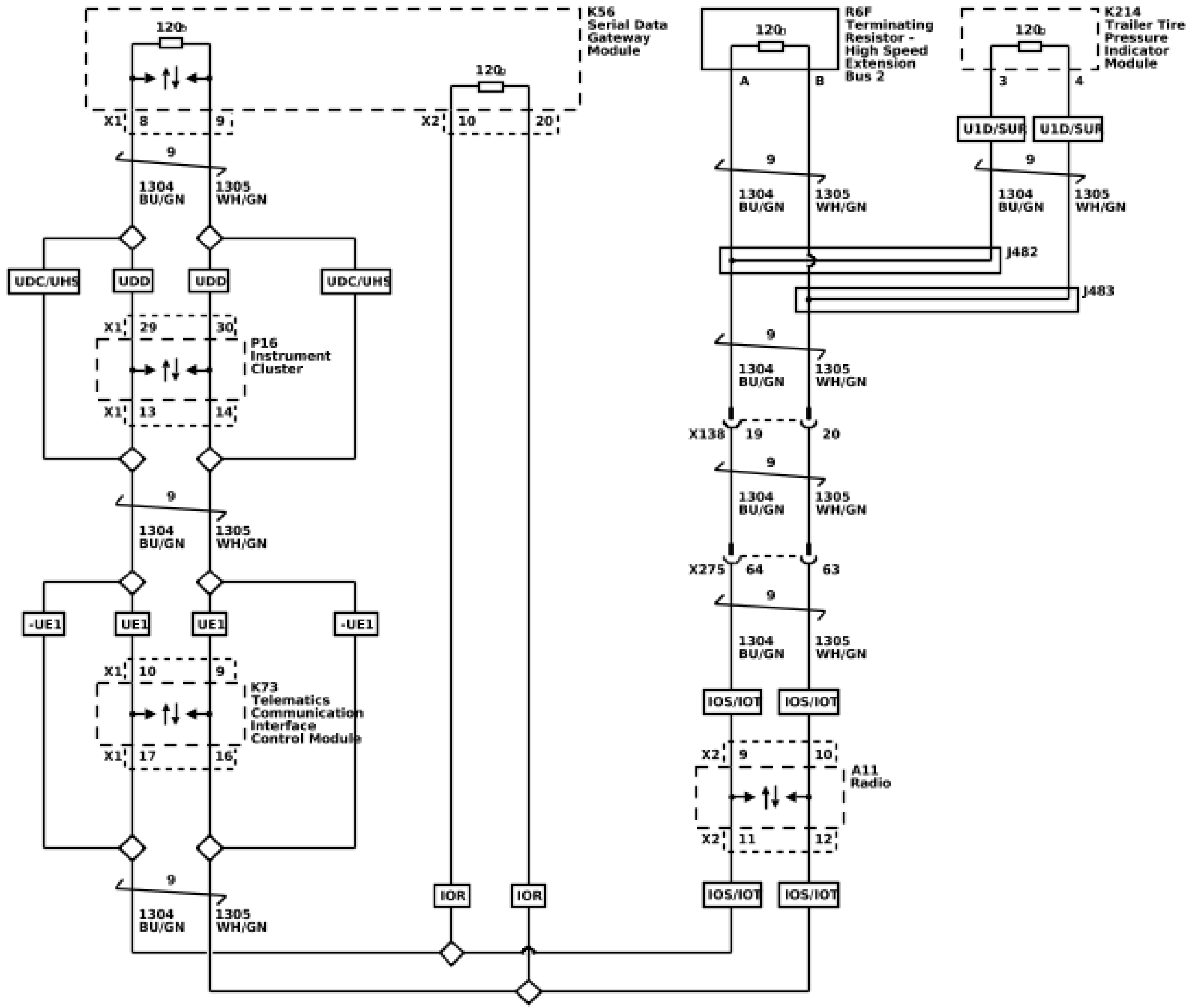

K20 Engine Control Module
120Ω
X1 60
59 (L3B)
X1 17
7 (-L3B)
2500 BU 9
2501 WH
MQB/MQB
MQB/MQB
MYC
MYC
37
38
K71 Transmission Control Module
53
54
X1 10
11
Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly
X1 14
13
MQB/MQB
MQB/MQB
MYC
MYC
2500 BU 9
2501 WH
-NP0-NQH
NP0/NQH
NP0/NQH
-NP0-NQH
3
4
K69 Transfer Case Control Module
15
16
NP0/NQH
NP0/NQH
2500 BU 9
2501 WH
X6 24
25
K9 Body Control Module
X1 25
24
2500 BU 9
2501 WH
X2 4
5
K56 Serial Data Gateway Module
X2 14
15
2500 BU 9
2501 WH
X225 32
31
2500 BU 9
2501 WH
A104 Brake Master Cylinder
41
25
K160 Brake System Control Module
42
26
2500 BU 9
2501 WH
X115 38
39
2500 BU 9
2501 WH
X140 35
36
2500 BU 9
2501 WH
X182 9
10
2500 WH/BU 9
2501 BU/WH
X1 7
8
K43 Power Steering Control Module
X1 2
3
2500 BK 9
2501 GN
X182 2
3
2500 BU 9
2501 WH
-Z45
Z45
Z45
-Z45
27
29
K19 Suspension Control Module
28
30
Z45
Z45
R6A Terminating Resistor - High Speed Bus
120Ω
A
B
2500 BU 9
2501 WH

5502184

Data Communication Schematics (High Speed GMLAN (LM2))

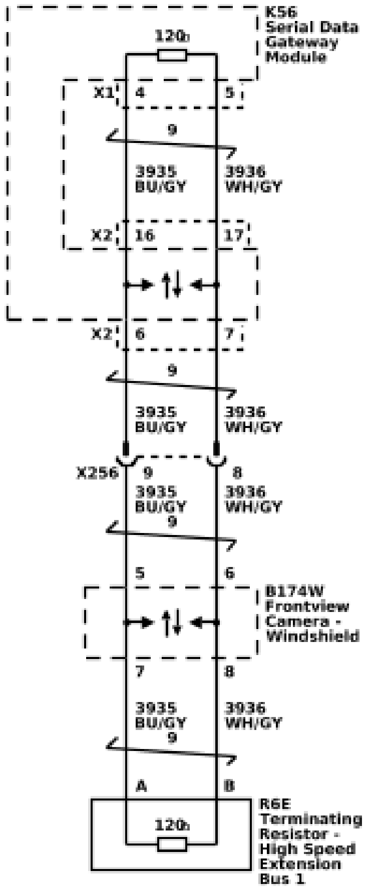

5502185
R6A Terminating Resistor - High Speed Bus
120Ω
A
B
2500 BU 9
2501 WH
K115 Reductant Control Module
X143
16
17
2500 BN 9
2501 BK
22
23
10
35
2501 BN
27
28
K19 Suspension Control Module
Z45
-Z45
30
29
X182
2
3
2500 BK 9
2501 GN
K56 Serial Data Gateway Module
X2
14
15
4
5
K9 Body Control Module
X1
25
24
X6
X140
35
36
9
10
2500 WH/BU 9
2501 BU/WH
K43 Power Steering Control Module
7
8
2
3
A104 Brake Master Cylinder
K160 Brake System Control Module
X225
32
31
41
42
26
X115
38
39
K69 Transfer Case Control Module
NP0/NQH
-NP0-NQH
15
16
3
4
K20 Engine Control Module
18
40
K71 Transmission Control Module
37
53
54
K34 Glow Plug Control Module
18
19
26

Data Communication Schematics (Gateway Isolated High Speed GMLAN)


K56
Serial Data
Gateway
Module
120Ω
X1 8 9
X2 10 20
9
1304
BU/GN
1305
WH/GN
UDC/UHS
UDD
UDD
UDC/UHS
X1 29 30
P16
Instrument
Cluster
X1 13 14
-UE1
UE1
UE1
-UE1
X1 10 9
K73
Telematics
Communication
Interface
Control Module
X1 17 16
IOR
IOR
R6F
Terminating
Resistor -
High Speed
Extension
Bus 2
A
B
J482
J483
X138 19 20
X275 64 63
IOS/IOT
X2 9 10
A11
Radio
X2 11 12
K214
Trailer Tire
Pressure
Indicator
Module
3
4
U1D/SUR

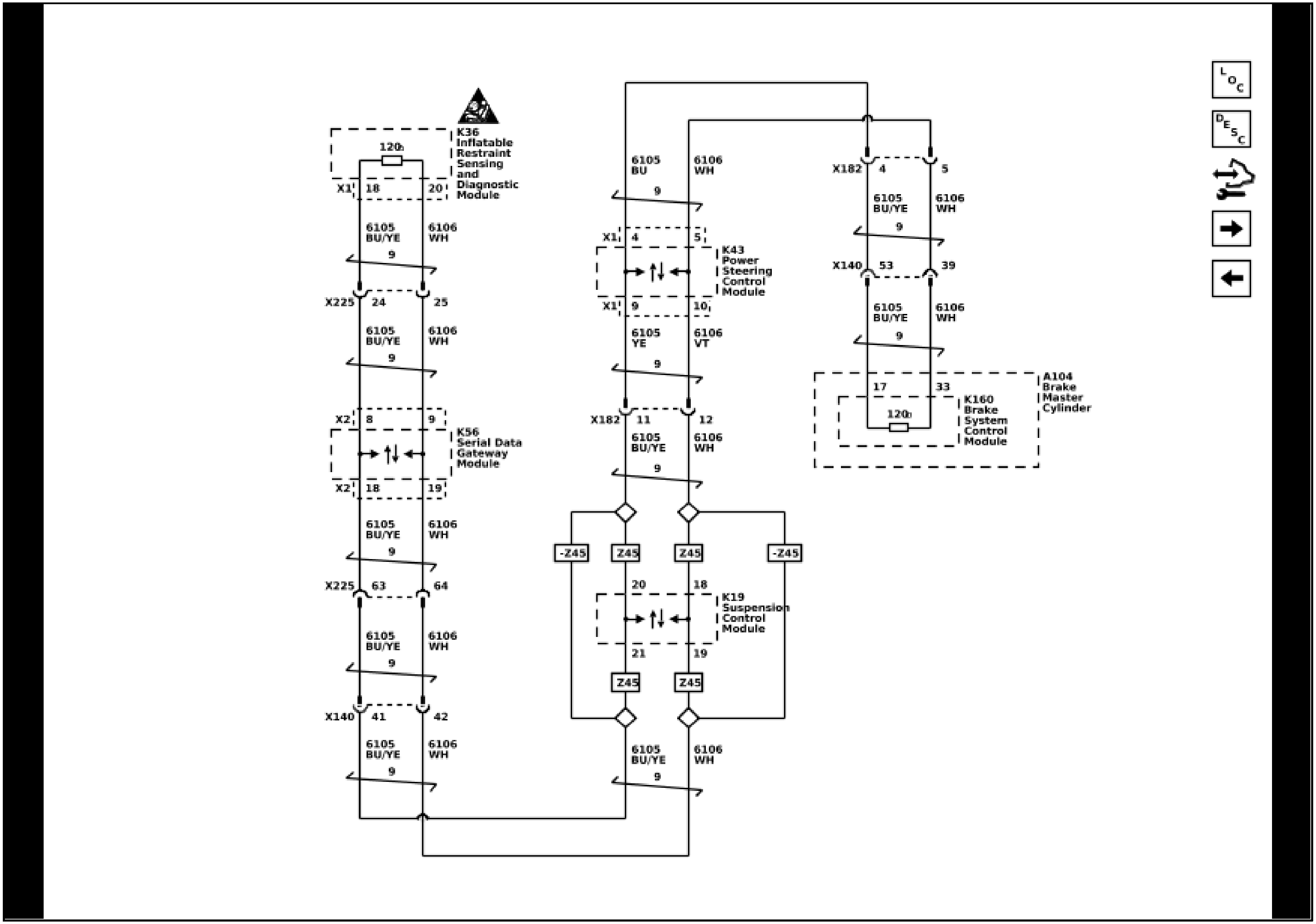
5502186

Data Communication Schematics (Gateway Expansion High Speed GMLAN (UEU/UHX))


K56
Serial Data
Gateway
Module
120Ω
X1
4
5
9
3935
BU/GY
3936
WH/GY
X2
16
17
X2
6
7
9
3935
BU/GY
3936
WH/GY
X256
9
8
3935
BU/GY
3936
WH/GY
9
5
6
B174W
Frontview
Camera -
Windshield
7
8
3935
BU/GY
3936
WH/GY
9
A
B
R6E
Terminating
Resistor -
High Speed
Extension
Bus 1
120Ω

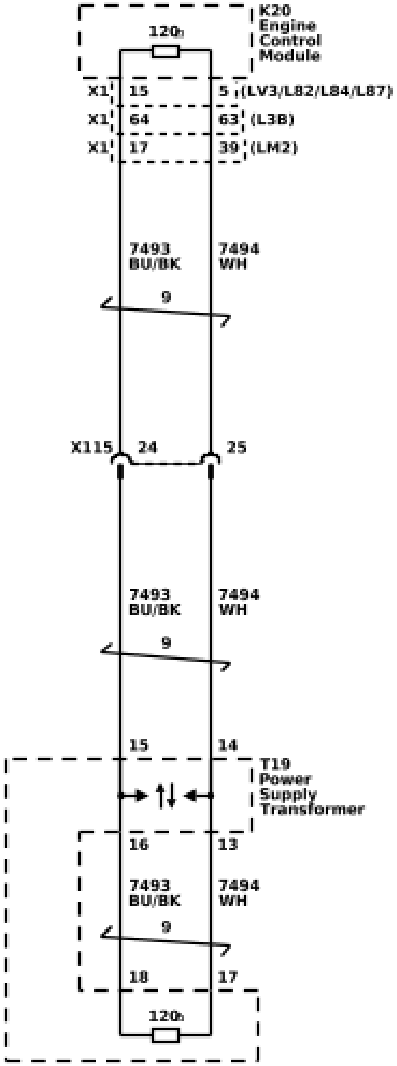
5502187

Data Communication Schematics (Chassis High Speed GMLAN)


K36 Inflatable Restraint Sensing and Diagnostic Module
120Ω
X1 18 20
6105 BU/YE
6106 WH
9
X225 24 25
X2 8 9
K56 Serial Data Gateway Module
X2 18 19
X225 63 64
X140 41 42
6105 BU
6106 WH
X1 4 5
K43 Power Steering Control Module
X1 9 10
6105 YE
6106 VT
X182 11 12
Z45
-Z45
20 18
K19 Suspension Control Module
21 19
X182 4 5
X140 53 39
A104 Brake Master Cylinder
17 33
K160 Brake System Control Module

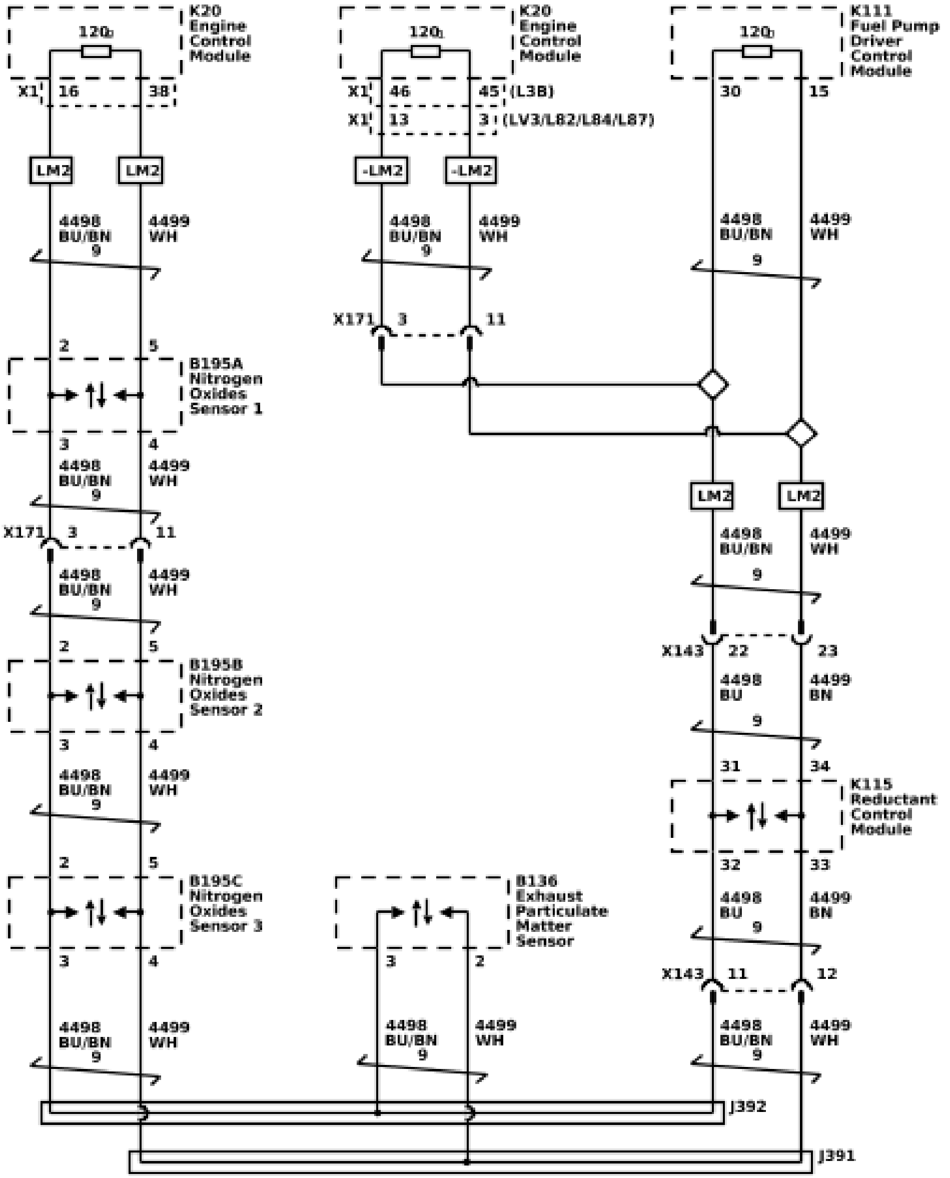
5502188

Data Communication Schematics (Powertrain High Speed GMLAN (KL9))


K20
Engine
Control
Module
120Ω
X1 15 5 (LV3/L82/L84/L87)
X1 64 63 (L3B)
X1 17 39 (LM2)
7493
BU/BK
7494
WH
9
X115 24 25
7493
BU/BK
7494
WH
9
15 14
T19
Power
Supply
Transformer
16 13
7493
BU/BK
7494
WH
9
18 17
120Ω

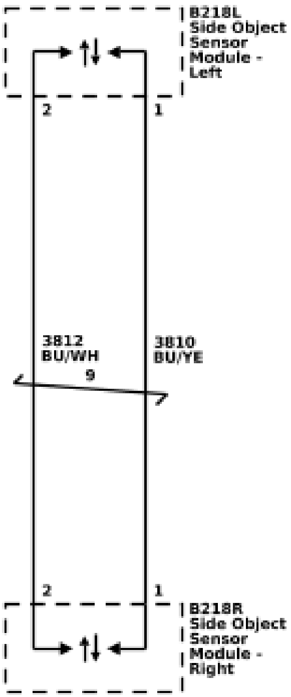
5502189

Data Communication Schematics (Powertrain Sensor High Speed GMLAN)


K20 Engine Control Module
120Ω
X1 16
38
LM2
LM2
4498 BU/BN 9
4499 WH
2
5
B195A Nitrogen Oxides Sensor 1
3
4
4498 BU/BN 9
4499 WH
X171 3
11
4498 BU/BN 9
4499 WH
2
5
B195B Nitrogen Oxides Sensor 2
3
4
4498 BU/BN 9
4499 WH
2
5
B195C Nitrogen Oxides Sensor 3
3
4
4498 BU/BN 9
4499 WH
K20 Engine Control Module
120Ω
X1 46
45 (L3B)
X1 13
3 (LV3/L82/L84/L87)
-LM2
-LM2
4498 BU/BN 9
4499 WH
X171 3
11
B136 Exhaust Particulate Matter Sensor
3
2
4498 BU/BN 9
4499 WH
K111 Fuel Pump Driver Control Module
120Ω
30
15
4498 BU/BN
4499 WH
9
LM2
LM2
4498 BU/BN
4499 WH
9
X143 22
23
4498 BU
4499 BN
9
31
34
K115 Reductant Control Module
32
33
4498 BU
4499 BN
9
X143 11
12
4498 BU/BN 9
4499 WH
J392
J391

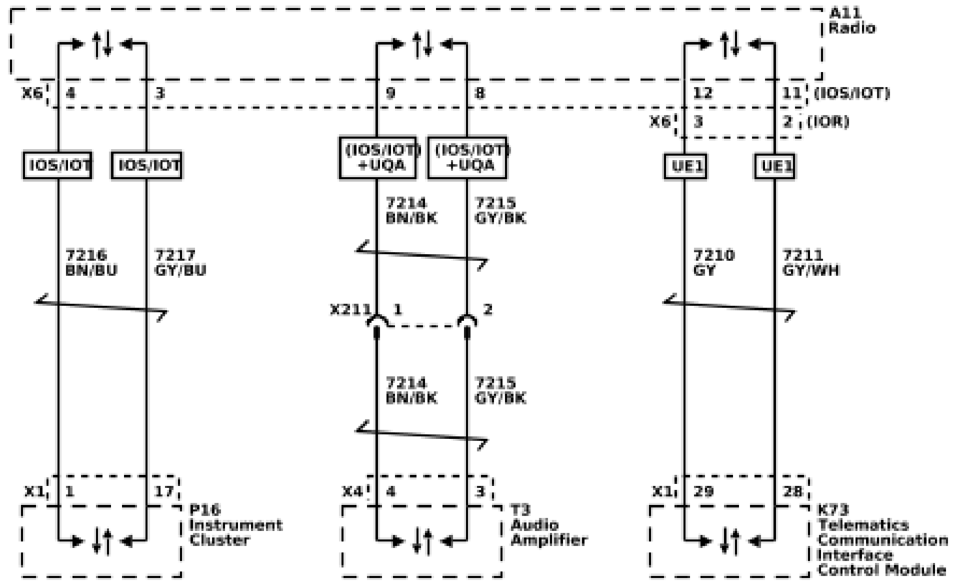
5502190

Data Communication Schematics (Object High Speed GMLAN (UKC))


B218L
Side Object
Sensor
Module -
Left
2
1
3812
BU/WH
9
3810
BU/YE
2
1
B218R
Side Object
Sensor
Module -
Right

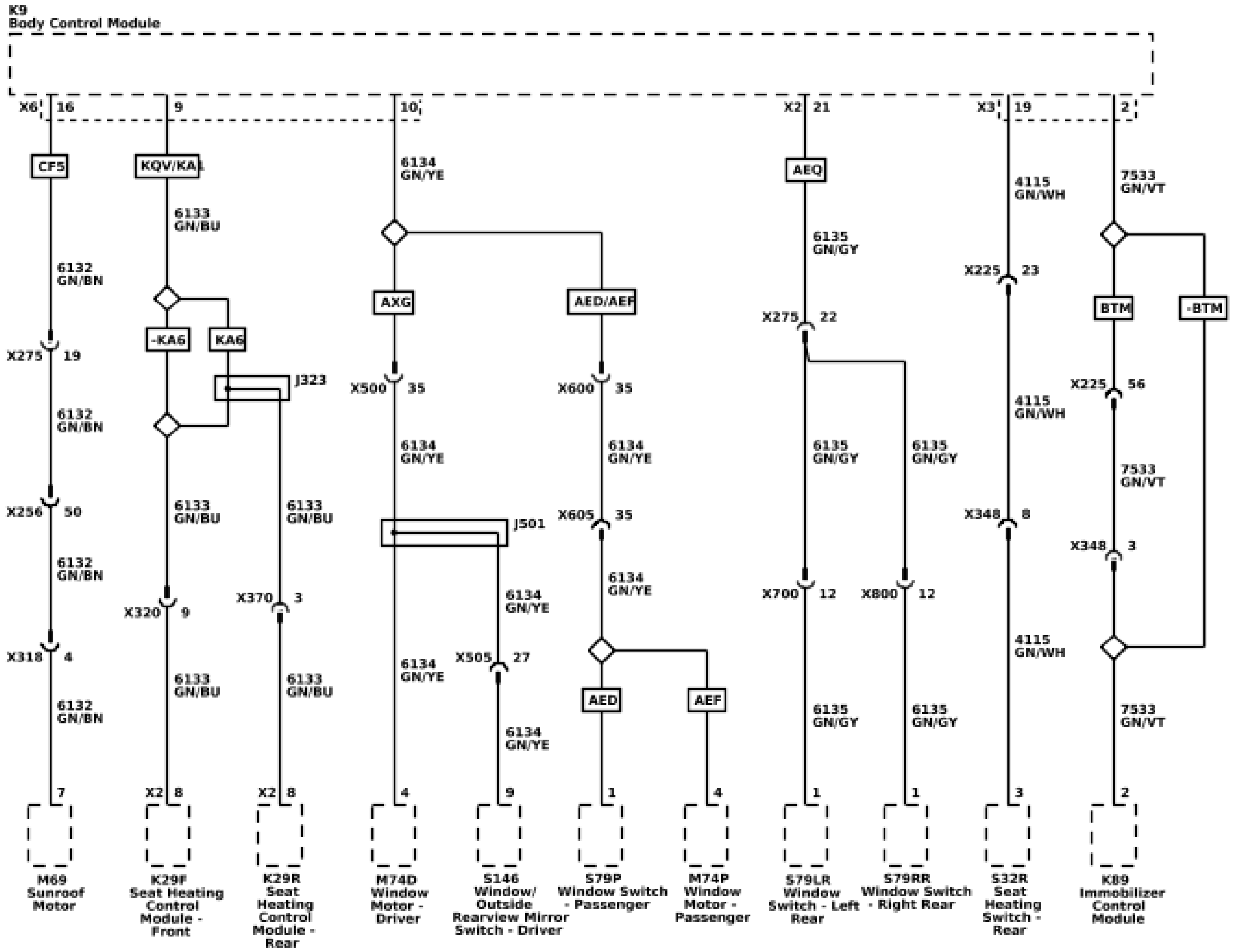
5502191

Data Communication Schematics (Ethernet Bus)


A11
Radio
X6
4
3
9
8
12
11
(IOS/IOT)
X6
3
2
(IOR)
IOS/IOT
IOS/IOT
(IOS/IOT)
+UQA
(IOS/IOT)
+UQA
UE1
UE1
7214
BN/BK
7215
GY/BK
7216
BN/BU
7217
GY/BU
7210
GY
7211
GY/WH
X211
1
2
7214
BN/BK
7215
GY/BK
X1
1
17
P16
Instrument
Cluster
X4
4
3
T3
Audio
Amplifier
X1
29
28
K73
Telematics
Communication
Interface
Control Module

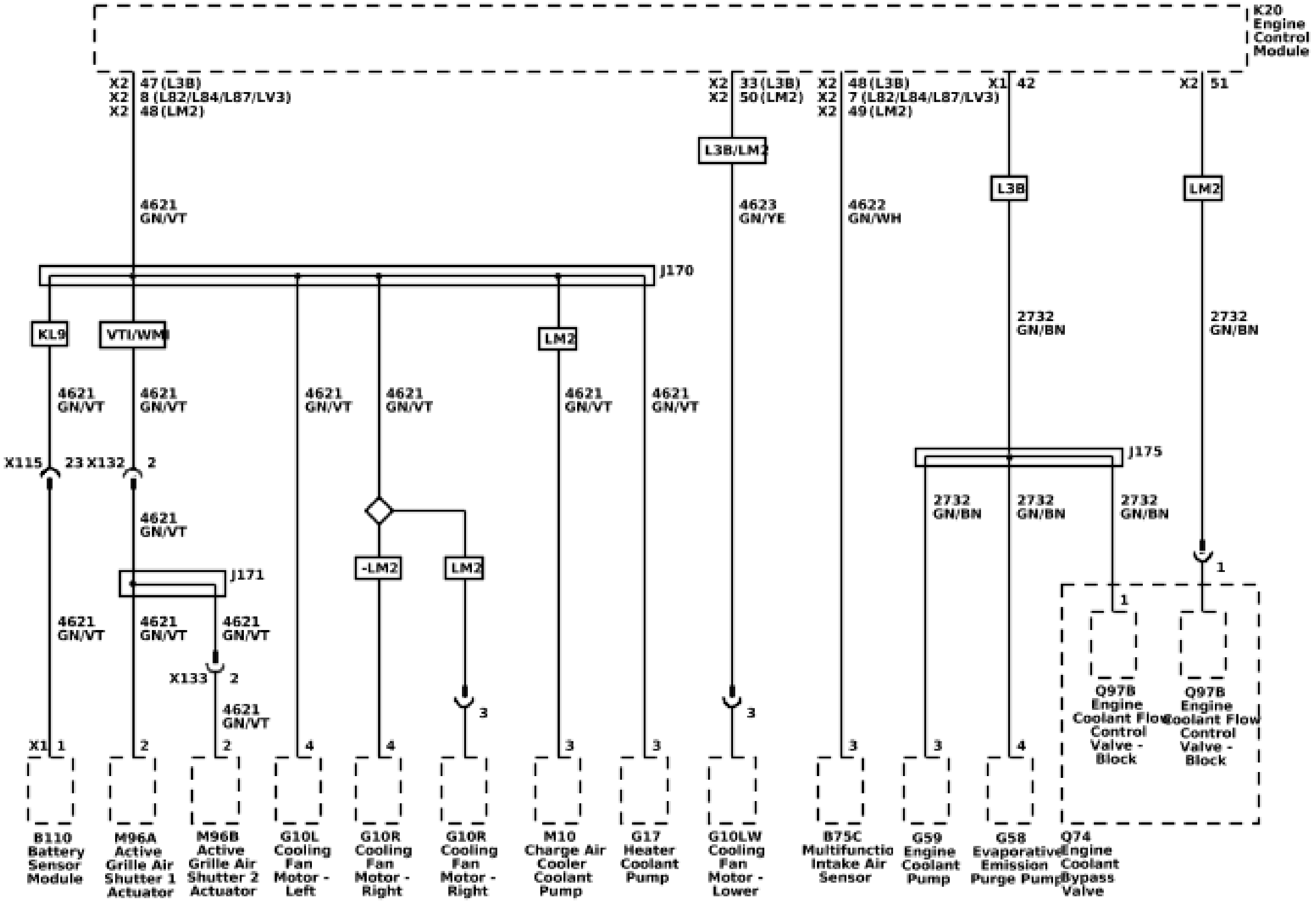
5502192

Data Communication Schematics (Local Interconnect Network (1 of 3))


K9
Body Control Module
X6 16
9
10
X2 21
X3 19
2
CF5
KQV/KA1
6134 GN/YE
AEQ
4115 GN/WH
7533 GN/VT
6133 GN/BU
6135 GN/GY
6132 GN/BN
X225 23
AXG
AED/AEF
BTM
-BTM
-KA6
KA6
X275 22
X275 19
J323
X500 35
X600 35
X225 56
6132 GN/BN
6134 GN/YE
6134 GN/YE
6135 GN/GY
6135 GN/GY
4115 GN/WH
7533 GN/VT
X256 50
6133 GN/BU
6133 GN/BU
J501
X605 35
X348 8
X348 3
6132 GN/BN
6134 GN/YE
6134 GN/YE
X370 3
X320 9
X700 12
X800 12
X318 4
X505 27
6134 GN/YE
4115 GN/WH
6132 GN/BN
6133 GN/BU
6133 GN/BU
AED
AEF
6135 GN/GY
6135 GN/GY
7533 GN/VT
6134 GN/YE
7
X2 8
X2 8
4
9
1
4
1
1
3
2
M69 Sunroof Motor
K29F Seat Heating Control Module - Front
K29R Seat Heating Control Module - Rear
M74D Window Motor - Driver
S146 Window/ Outside Rearview Mirror Switch - Driver
S79P Window Switch - Passenger
M74P Window Motor - Passenger
S79LR Window Switch - Left Rear
S79RR Window Switch - Right Rear
S32R Seat Heating Switch - Rear
K89 Immobilizer Control Module

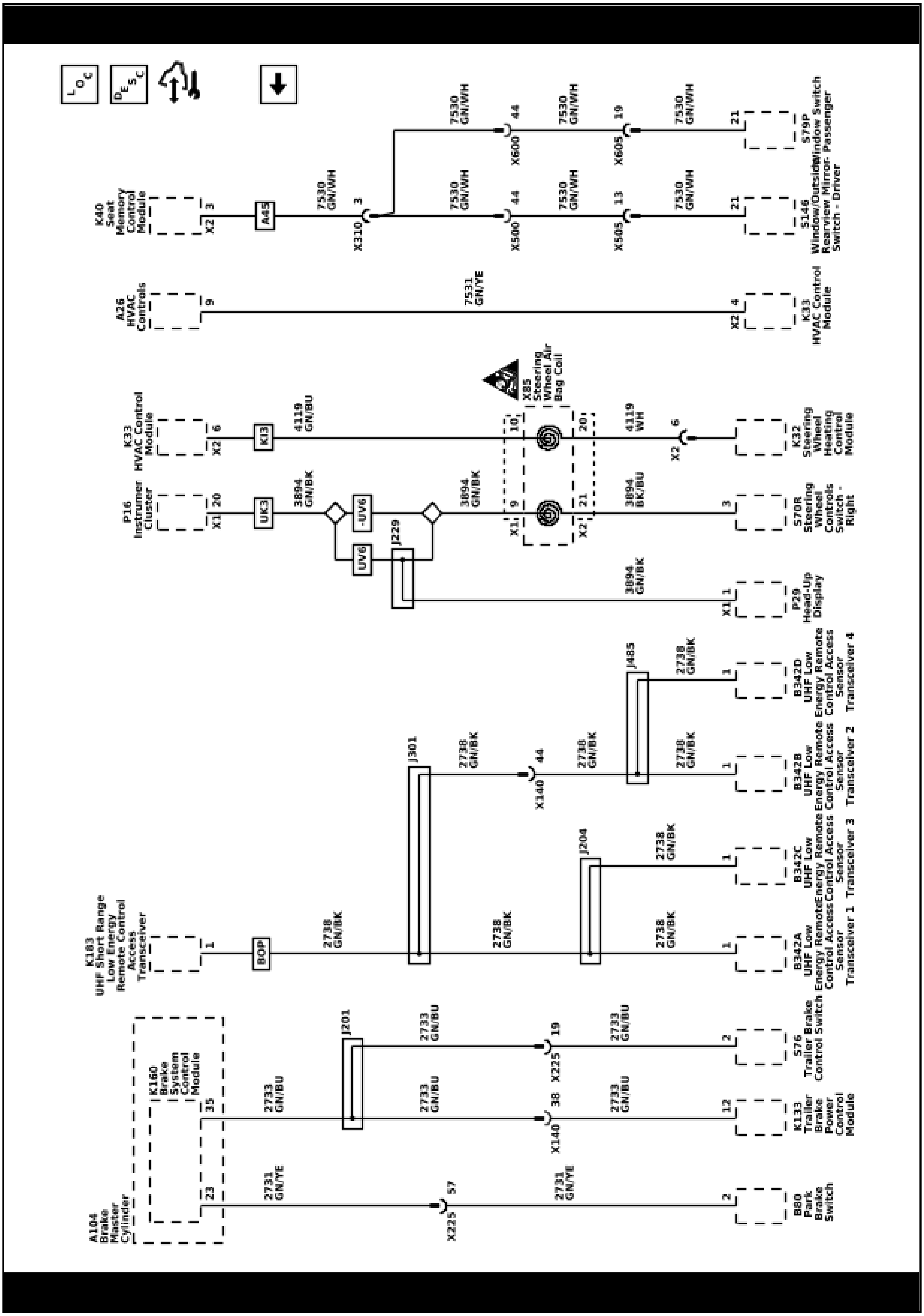
5502193

Data Communication Schematics (Local Interconnect Network (2 of 3))

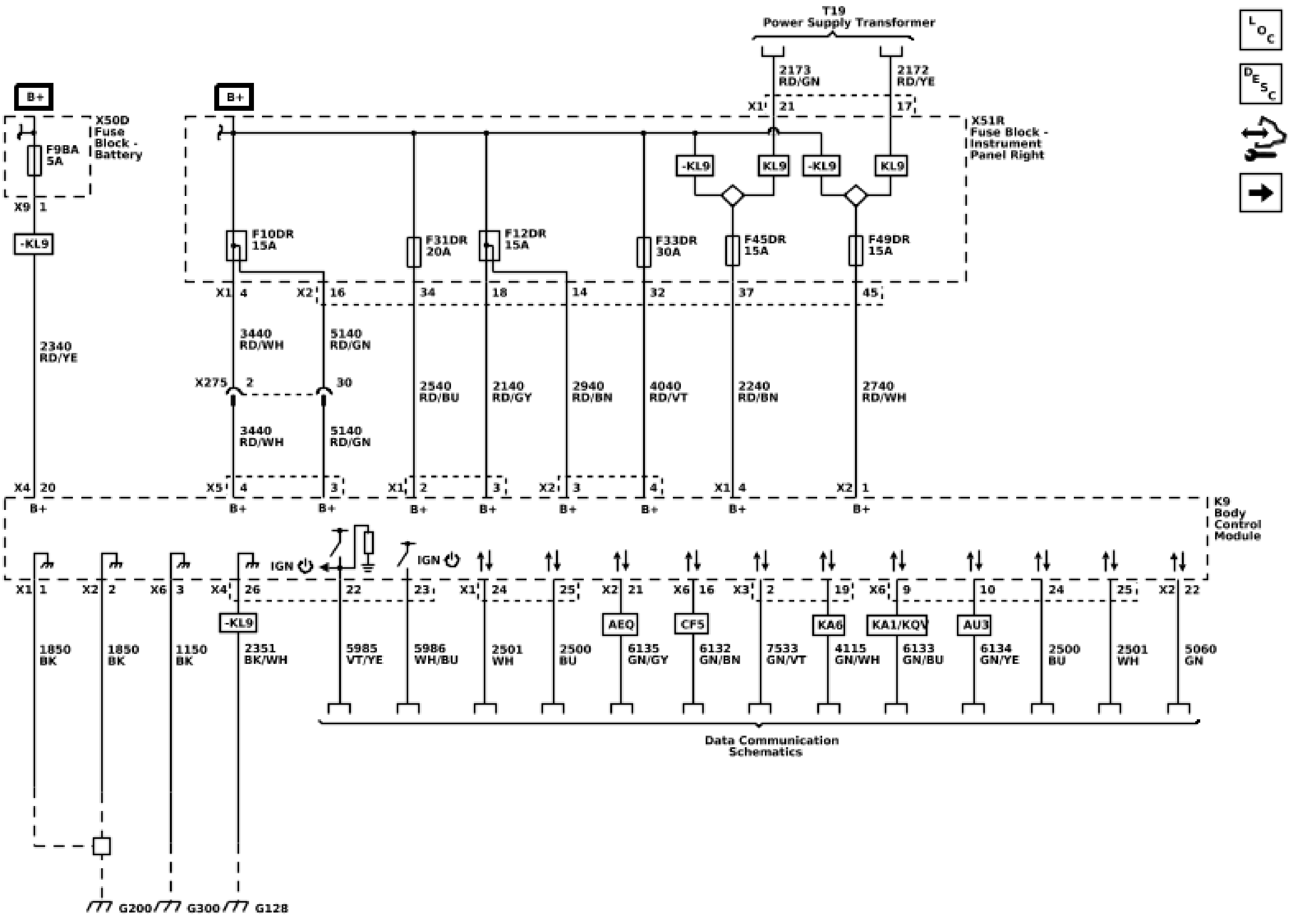

K20 Engine Control Module
X2 47 (L3B)
X2 8 (L82/L84/L87/LV3)
X2 48 (LM2)
X2 33 (L3B)
X2 50 (LM2)
X2 48 (L3B)
X2 7 (L82/L84/L87/LV3)
X2 49 (LM2)
X1 42
X2 51
L3B/LM2
L3B
LM2
4621 GN/VT
4623 GN/YE
4622 GN/WH
2732 GN/BN
J170
KL9
VTI/WM
LM2
-LM2
J175
J171
X115
23 X132
2
X133
X1 1
1
2
3
4
B110 Battery Sensor Module
M96A Active Grille Air Shutter 1 Actuator
M96B Active Grille Air Shutter 2 Actuator
G10L Cooling Fan Motor - Left
G10R Cooling Fan Motor - Right
G10R Cooling Fan Motor - Right
M10 Charge Air Cooler Coolant Pump
G17 Heater Coolant Pump
G10LW Cooling Fan Motor - Lower
B75C Multifunctio Intake Air Sensor
G59 Engine Coolant Pump
G58 Evaporative Emission Purge Pump
Q74 Engine Coolant Bypass Valve
Q97B Engine Coolant Flow Control Valve - Block
Q97B Engine Coolant Flow Control Valve - Block

5502194

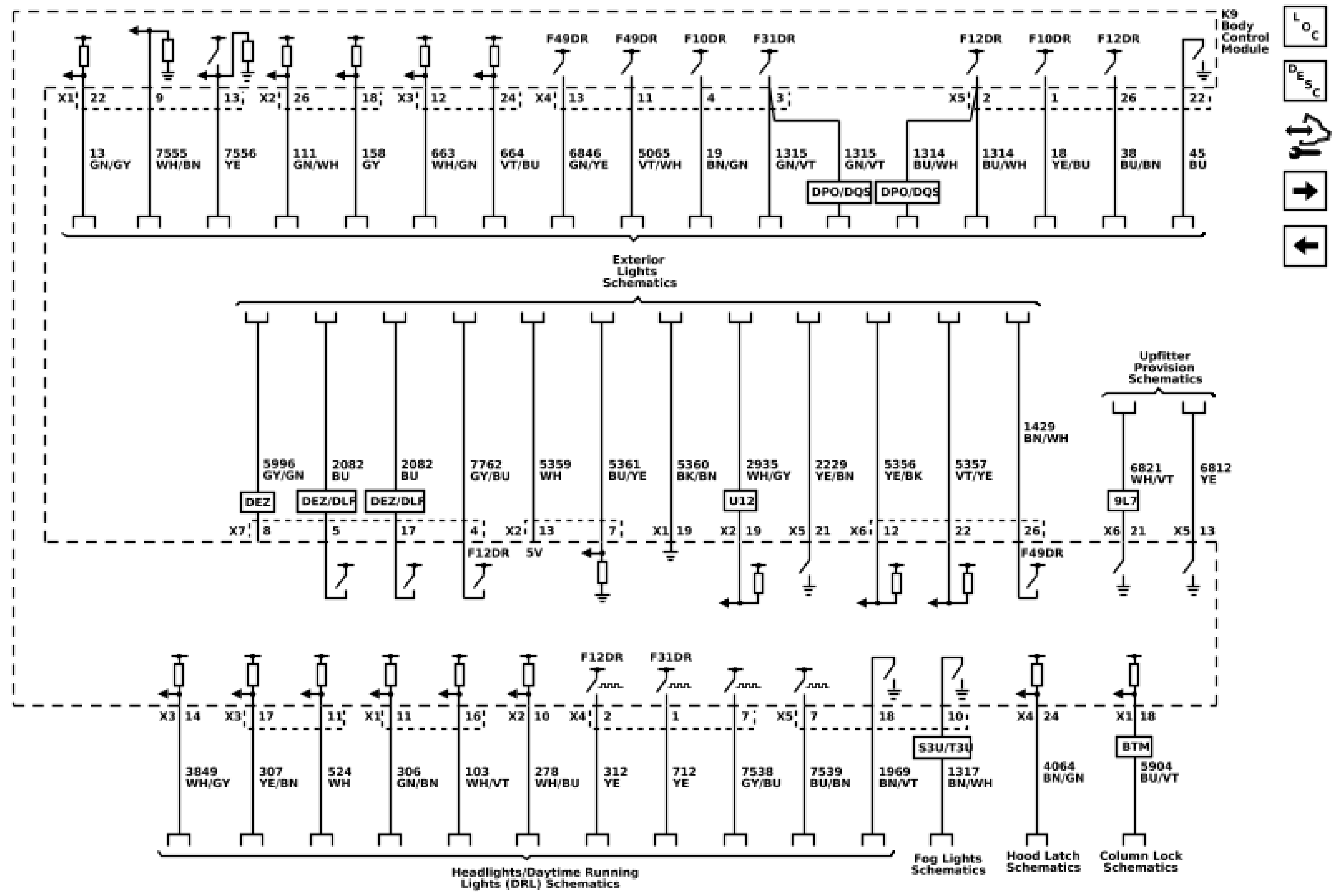
Data Communication Schematics (Local Interconnect Network (3 of 3))


5502195
A104 Brake Master Cylinder
K160 Brake System Control Module
23
35
2731 GN/YE
X225
57
B80 Park Brake Switch
2733 GN/BU
J201
X140
38
12
K133 Trailer Brake Power Control Module
X225
19
2
S76 Trailer Brake Control Switch
K183 UHF Short Range Low Energy Remote Control Access Transceiver
1
BOP
2738 GN/BK
J301
J204
B342A UHF Low Energy Remote Control Access Sensor Transceiver 1
B342C UHF Low Energy Remote Control Access Sensor Transceiver 3
44
B342B UHF Low Energy Remote Control Access Sensor Transceiver 2
J485
B342D UHF Low Energy Remote Control Access Sensor Transceiver 4
P16 Instrumer Cluster
X1
20
UK3
3894 GN/BK
-UV6
UV6
J229
P29 Head-Up Display
X85 Steering Wheel Air Bag Coil
9
21
10
20
3894 BK/BU
S70R Steering Wheel Controls Switch - Right
3
K33 HVAC Control Module
X2
6
KI3
4119 GN/BU
4119 WH
K32 Steering Wheel Heating Control Module
A26 HVAC Controls
7531 GN/YE
4
K33 HVAC Control Module
K40 Seat Memory Control Module
A45
7530 GN/WH
X310
X500
X505
13
S146 Window/Outside Rearview Mirror Switch - Driver
X600
X605
S79P Window Switch - Passenger
LOC
DESC

Body Control System Schematics (Module Power, Ground and Serial Data)

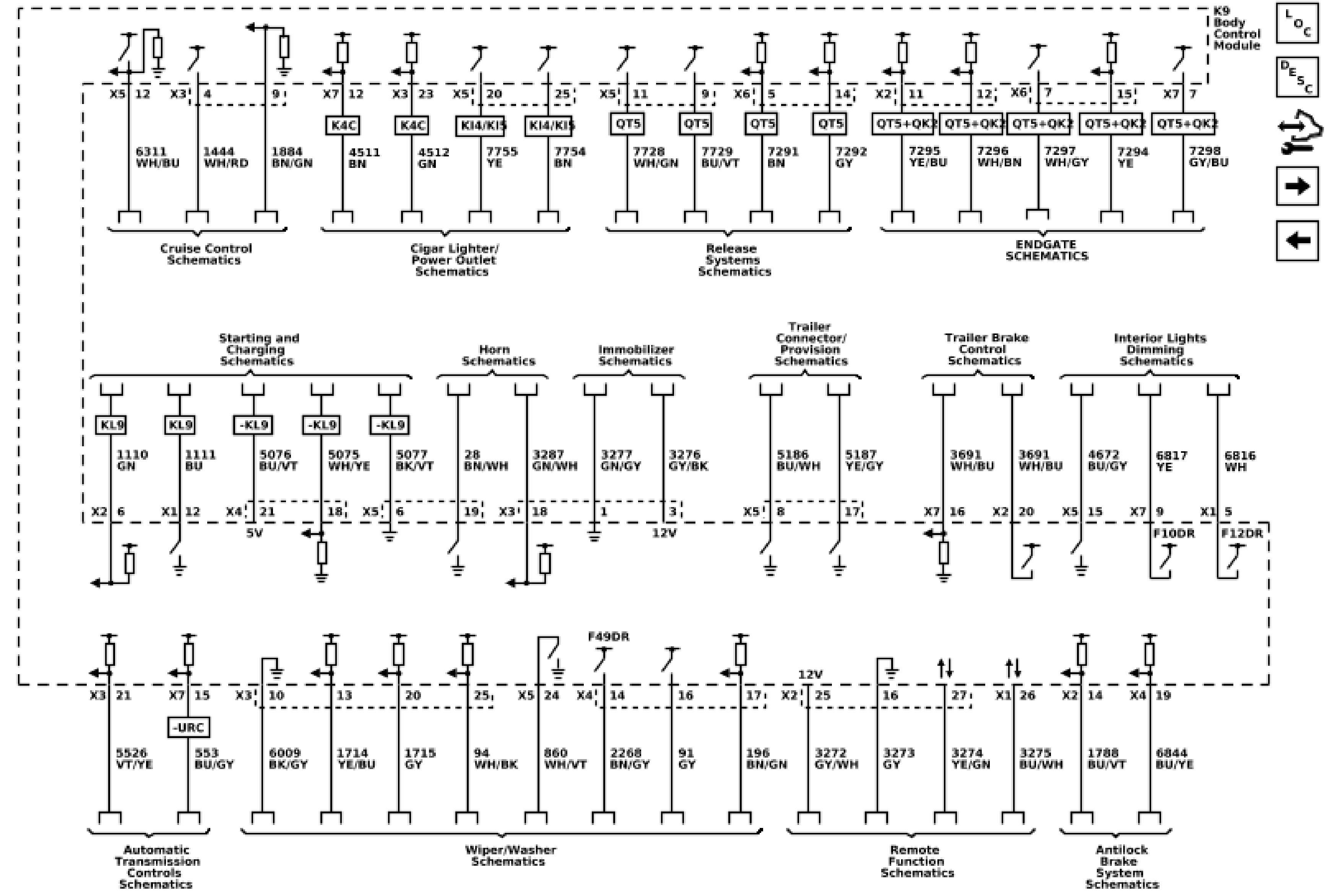

T19
Power Supply Transformer
2173
RD/GN
2172
RD/YE
X1 21
17
B+
X50D
Fuse
Block -
Battery
F9BA
5A
X9 1
-KL9
2340
RD/YE
B+
X51R
Fuse Block -
Instrument
Panel Right
-KL9
KL9
-KL9
KL9
F10DR
15A
F31DR
20A
F12DR
15A
F33DR
30A
F45DR
15A
F49DR
15A
X1 4
X2 16
34
18
14
32
37
45
3440
RD/WH
5140
RD/GN
X275 2
30
3440
RD/WH
5140
RD/GN
2540
RD/BU
2140
RD/GY
2940
RD/BN
4040
RD/VT
2240
RD/BN
2740
RD/WH
X4 20
X5 4
3
X1 2
3
X2 3
4
X1 4
X2 1
B+
K9
Body
Control
Module
IGN
IGN
X1 1
X2 2
X6 3
X4 26
22
23
X1 24
25
X2 21
X6 16
X3 2
19
X6 9
10
24
25
X2 22
-KL9
AEQ
CF5
KA6
KA1/KQV
AU3
1850
BK
1850
BK
1150
BK
2351
BK/WH
5985
VT/YE
5986
WH/BU
2501
WH
2500
BU
6135
GN/GY
6132
GN/BN
7533
GN/VT
4115
GN/WH
6133
GN/BU
6134
GN/YE
2500
BU
2501
WH
5060
GN
Data Communication
Schematics
G200
G300
G128
L O C
D E S C
5502196

Body Control System Schematics (Subsystem References (1 of 3))


K9 Body Control Module
LOC
DESC
X1 22 13 GN/GY
9 7555 WH/BN
13 7556 YE
X2 26 111 GN/WH
18 158 GY
X3 12 663 WH/GN
24 664 VT/BU
F49DR X4 13 6846 GN/YE
F49DR 11 5065 VT/WH
F10DR 4 19 BN/GN
F31DR 3 1315 GN/VT
1315 GN/VT DPO/DQS
1314 BU/WH DPO/DQS
F12DR X5 2 1314 BU/WH
F10DR 1 18 YE/BU
F12DR 26 38 BU/BN
22 45 BU
Exterior Lights Schematics
X7 8 DEZ 5996 GY/GN
5 DEZ/DLF 2082 BU
17 DEZ/DLF 2082 BU
4 F12DR 7762 GY/BU
X2 13 5V 5359 WH
7 5361 BU/YE
X1 19 5360 BK/BN
X2 19 U12 2935 WH/GY
X5 21 2229 YE/BN
X6 12 5356 YE/BK
22 5357 VT/YE
26 F49DR 1429 BN/WH
Upfitter Provision Schematics
X6 21 9L7 6821 WH/VT
X5 13 6812 YE
X3 14 3849 WH/GY
X3 17 307 YE/BN
11 524 WH
X1 11 306 GN/BN
16 103 WH/VT
X2 10 278 WH/BU
F12DR X4 2 312 YE
F31DR 1 712 YE
7 7538 GY/BU
X5 7 7539 BU/BN
18 1969 BN/VT
Headlights/Daytime Running Lights (DRL) Schematics
10 S3U/T3U 1317 BN/WH
Fog Lights Schematics
X4 24 4064 BN/GN
Hood Latch Schematics
X1 18 BTM 5904 BU/VT
Column Lock Schematics

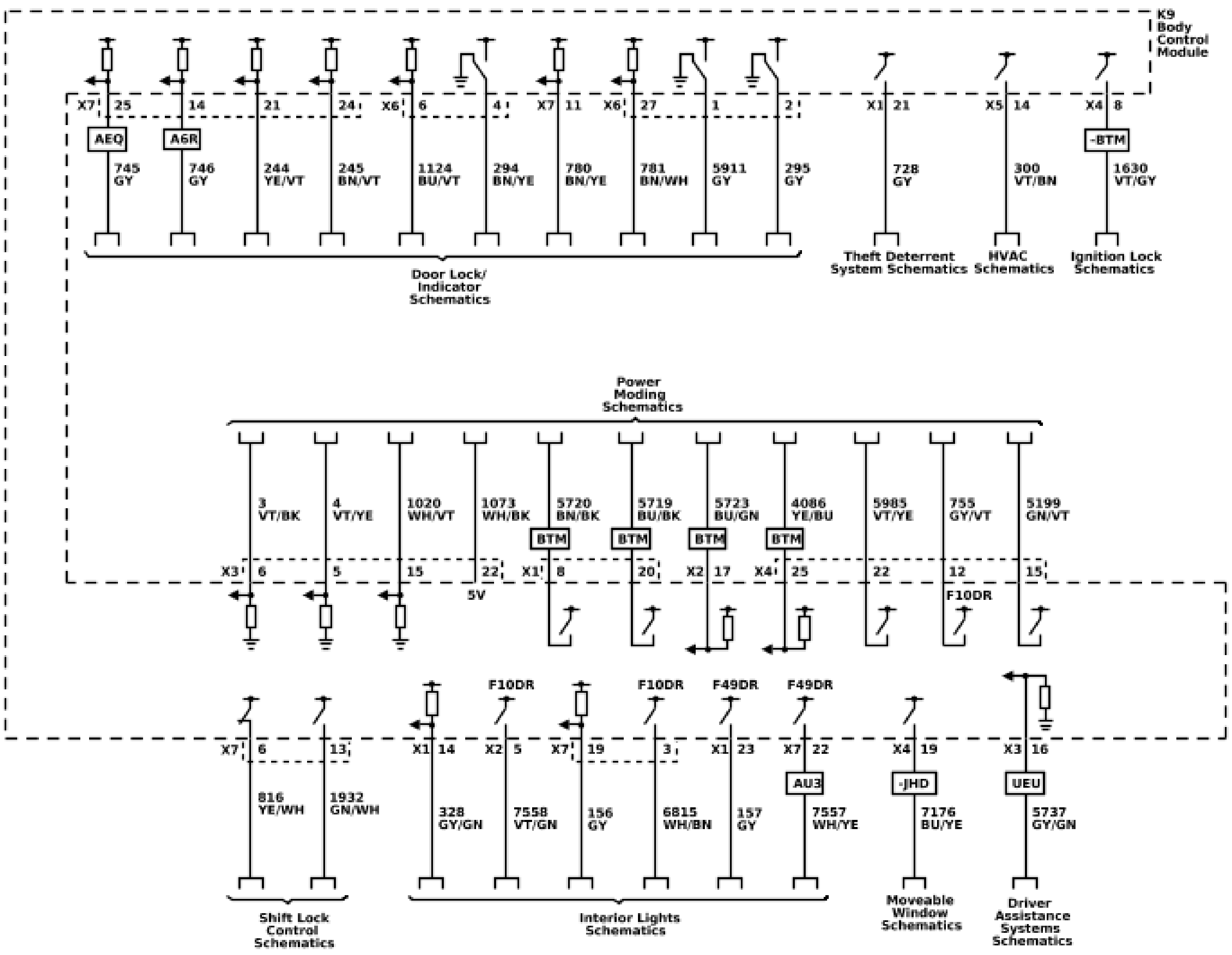
5502197

Body Control System Schematics (Subsystem References (2 of 3))


K9 Body Control Module
X5 12
X3 4
9
X7 12
X3 23
X5 20
25
X5 11
9
X6 5
14
X2 11
12
X6 7
15
X7 7
K4C
K4C
KI4/KI5
KI4/KI5
QT5
QT5
QT5
QT5
QT5+QK2
QT5+QK2
QT5+QK2
QT5+QK2
QT5+QK2
6311 WH/BU
1444 WH/RD
1884 BN/GN
4511 BN
4512 GN
7755 YE
7754 BN
7728 WH/GN
7729 BU/VT
7291 BN
7292 GY
7295 YE/BU
7296 WH/BN
7297 WH/GY
7294 YE
7298 GY/BU
Cruise Control Schematics
Cigar Lighter/ Power Outlet Schematics
Release Systems Schematics
ENDGATE SCHEMATICS
Starting and Charging Schematics
Horn Schematics
Immobilizer Schematics
Trailer Connector/ Provision Schematics
Trailer Brake Control Schematics
Interior Lights Dimming Schematics
KL9
KL9
-KL9
-KL9
-KL9
1110 GN
1111 BU
5076 BU/VT
5075 WH/YE
5077 BK/VT
28 BN/WH
3287 GN/WH
3277 GN/GY
3276 GY/BK
5186 BU/WH
5187 YE/GY
3691 WH/BU
3691 WH/BU
4672 BU/GY
6817 YE
6816 WH
X2 6
X1 12
X4 21
18
X5 6
19
X3 18
1
3
X5 8
17
X7 16
X2 20
X5 15
X7 9
X1 5
5V
12V
F10DR
F12DR
F49DR
12V
X3 21
X7 15
X3 10
13
20
25
X5 24
X4 14
16
17
X2 25
16
27
X1 26
X2 14
X4 19
-URC
5526 VT/YE
553 BU/GY
6009 BK/GY
1714 YE/BU
1715 GY
94 WH/BK
860 WH/VT
2268 BN/GY
91 GY
196 BN/GN
3272 GY/WH
3273 GY
3274 YE/GN
3275 BU/WH
1788 BU/VT
6844 BU/YE
Automatic Transmission Controls Schematics
Wiper/Washer Schematics
Remote Function Schematics
Antilock Brake System Schematics
LOC
DESC

5502198

Body Control System Schematics (Subsystem References (3 of 3))


K9 Body Control Module
X7 25
AEQ
745 GY
14
A6R
746 GY
21
244 YE/VT
24
245 BN/VT
X6 6
1124 BU/VT
4
294 BN/YE
X7 11
780 BN/YE
X6 27
781 BN/WH
1
5911 GY
2
295 GY
Door Lock/ Indicator Schematics
X1 21
728 GY
Theft Deterrent System Schematics
X5 14
300 VT/BN
HVAC Schematics
X4 8
-BTM
1630 VT/GY
Ignition Lock Schematics
Power Moding Schematics
3 VT/BK
4 VT/YE
1020 WH/VT
1073 WH/BK
5720 BN/BK
5719 BU/BK
5723 BU/GN
4086 YE/BU
5985 VT/YE
755 GY/VT
5199 GN/VT
BTM
BTM
BTM
BTM
X3 6
5
15
22
5V
X1 8
20
X2 17
X4 25
22
12
F10DR
15
F10DR
F10DR
F49DR
F49DR
X7 6
13
816 YE/WH
1932 GN/WH
Shift Lock Control Schematics
X1 14
328 GY/GN
X2 5
7558 VT/GN
X7 19
156 GY
3
6815 WH/BN
X1 23
157 GY
X7 22
AU3
7557 WH/YE
Interior Lights Schematics
X4 19
-JHD
7176 BU/YE
Moveable Window Schematics
X3 16
UEU
5737 GY/GN
Driver Assistance Systems Schematics

5502199

Description and Operation

Data Link Communications Description and Operation

Note: This is an overview of different serial data buses used by GM devices to communicate with each others. Use *Data Communication Schematics on page 7-4* to find out which serial data buses are configured for a specific vehicle.

Data Link Communications Overview

There are many components in a vehicle that rely on information from other sources, transmit information to other sources, or both. Serial data communication networks provide a reliable, cost effective, way for various components of the vehicle to “talk” to one another and share information.

GM uses a number of different communication buses to insure the timely and efficient exchange of information between devices. When compared to each other, some of these buses are different in nature as far as speed, signal characteristics, and behavior. An example of this is the High Speed GMLAN and Low Speed GMLAN Buses.

On the other hand, when other buses are compared to each other they have similar characteristics and simply operate in parallel. In this case they are used to group together components which have high interaction. Examples are the High Speed GMLAN, Powertrain Expansion, and Chassis Expansion Buses. This allows them to communicate with each other on a bus with reduced message congestion insuring faster and the more timely exchange of information than if all vehicle devices were on a single bus.

The majority of information that exists within a given network generally stays local; however some information will have to be shared on other networks. Control modules designated as Gateway’s perform the function of transferring information between the various buses. A Gateway module is connected to at least 2 buses and will interact with each network according to its message strategy and transmission models.

GMLAN provides the capability for a receiving device to monitor message transmissions from other devices in order to determine if messages of interest are not being received. The primary purpose is to allow reasonable default values to be substituted for the information no longer being received. Additionally, a device may set a Diagnostic Trouble Code (DTC) to indicate that the device it is expecting information from is no longer communicating. A lost communication DTC typically is set in devices other than the device with a communication failure.

K9 Body Control Module (BCM)

The K9 Body Control Module has discrete input and output terminals to control the vehicle's body functions. The K9 Body Control Module is wired to the High Speed GMLAN Bus, Low Speed GMLAN Bus and multiple Local Interconnect Network (LIN) Buses and acts as a gateway between them. The various K9 Body Control Module input and output circuits are illustrated in the corresponding functional areas on the K9 Body Control Module electrical schematics. Refer to the *Body Control System Schematics on page 7-20* for more detailed information.

Power Mode Master

The K9 Body Control Module functions as the power mode master. The ignition switch is a low current switch with multiple discrete ignition switch signals to the power mode master for determining the power mode that will be sent over the serial data circuits to the other devices that need this information; the power mode master will activate relays and other direct outputs of the power mode master as needed. Refer to *Power Mode Description and Operation (Without BTM and/or ATH/ATS) on page 7-1217* or *Power Mode Description and Operation (BTM and/or ATH/ATS) on page 7-1219* for a complete description of power mode functions.

Gateway

The K9 Body Control Module functions as a gateway or translator. The purpose of the gateway is to translate serial data messages between the High Speed GMLAN Bus and the Low Speed GMLAN Bus for communication between the various devices. The gateway will interact with each network according to that network's transmission protocol. All communication between the K9 Body Control Module and a scan tool is done through the primary High Speed GMLAN Bus.

K56 Serial Data Gateway Module (Gen 3)

Note: The Data Bus Diagnostic Tool will not work with vehicles equipped with K56 Serial Data Gateway Module gen 3.

This vehicle is equipped with a K56 Serial Data Gateway Module gen 3. The K56 Serial Data Gateway Module is used to handle communications between multiple GMLAN buses and functions as a gateway to isolate the secure networks from the unsecured networks. It was created to mitigate bus loading to support cyber security and new active/advanced safety features (if equipped). The K56 Serial Data Gateway Module is used as a frame-to-frame gateway for all functional messages. Communication between the K56 Serial Data Gateway Module and a scan tool is done through the primary High Speed GMLAN bus. When the K56 Serial Data Gateway Module is not communicating, the scan tool can not communicate with the vehicle.

The K56 Serial Data Gateway Module has two microprocessors within the electronic control unit. Each microprocessor is diagnosed/programmed independently via the scan tool because the two microprocessors do not talk internally. Each of these processors are responsible for managing the traffic for specific communication buses on the vehicle. The two particular buses that they will manage are high speed and low speed. If communication does not exist or the particular micros have not been programmed, control modules won’t be able to communicate with or through the K56 Serial Data Gateway Module.

Low speed Microprocessor

- The low speed microprocessor is programmable via the X84 Data Link Connector (DLC) terminal 1. This low speed bus between the X84 Data Link Connector and the K56 Serial Data Gateway Module is called the Low Speed DLC Bus.
- The low speed microprocessor is capable of gating signals between the Low Speed DLC, the primary Low Speed GMLAN, and the Gateway Isolated Low Speed GMLAN Buses.
- The low speed microprocessor is also capable of gating signals between the Object High Speed DLC Bus (DLC terminals 3 & 11) and the Object High Speed GMLAN Bus.

High speed Microprocessor

- The high speed micro is programmable via the X84 Data Link Connector (DLC) terminals 6 & 14. This high speed bus between the X84 Data Link Connector and the K56 Serial Data Gateway Module is called High Speed DLC Bus.
- The high speed micro is capable of gating signals between the High Speed DLC, the primary High Speed GMLAN, the Gateway Expansion High Speed GMLAN, and the Gateway Isolated High Speed GMLAN Buses.
- The high speed micro is also capable of gating signals between the Chassis High Speed DLC Bus (DLC terminals 12 & 13) and the Chassis High Speed GMLAN Bus.

High Speed GMLAN Bus (Circuits 2500 & 2501)

Note: Continuity check cannot be performed between the X84 Data Link Connector and control modules on the primary High Speed GMLAN Bus.

A primary High Speed GMLAN Bus is used where data needs to be exchanged at a high enough rate to minimize the delay between the occurrence of a change in sensor value and the reception of this information by a control device using the information to adjust vehicle system performance.

The primary High Speed GMLAN serial data network consists of two twisted wires. One signal circuit is identified as GMLAN-High and the other signal circuit is identified as GMLAN-Low. At each end of the data bus there is a 120 Ω termination resistor between the GMLAN-High and GMLAN-Low circuits.

Data symbols (1’s and 0’s) are transmitted sequentially at a rate of 500 Kbit/s. The data to be transmitted over the bus is represented by the voltage difference between the GMLAN-High signal voltage and the GMLAN-Low signal voltage.

When the two wire bus is at rest the GMLAN-High and GMLAN-Low signal circuits are not being driven and this represents a logic “1”. In this state both signal circuits are at the same voltage of 2.5 V. The differential voltage is approximately 0 V.

When a logic “0” is to be transmitted, the GMLAN-High signal circuit is driven higher to about 3.5 V and the GMLAN-Low circuit is driven lower to about 1.5 V. The differential voltage becomes approximately 2.0 (+/- 0.5) V.

High Speed DLC Bus (Circuits 1978 & 1979)

Between the X84 Data Link Connector (DLC) terminals 6 & 14 and the K56 Serial Data Gateway Module terminals 15 X1 & 16 X1, there is a high speed bus called the High Speed DLC Bus. The High Speed DLC Bus is similar to the primary High Speed GMLAN Bus. Between the GMLAN-High and GMLAN-Low circuits, there is a 120 Ω termination resistor internal to the K56 Serial Data Gateway Module. There is no terminating resistor at the DLC.

The K56 Serial Data Gateway Module uses its high speed microprocessor to gate signals between the High Speed DLC, the primary High Speed GMLAN, the Gateway Expansion High Speed GMLAN, and the Gateway Isolated High Speed GMLAN Buses.

Chassis High Speed GMLAN Bus (Circuits 6105 & 6106) (if equipped)

Note: Continuity check cannot be performed between the X84 Data Link Connector and control modules on the Chassis High Speed GMLAN Bus.

The Chassis High Speed GMLAN Bus (or Chassis Expansion Bus) is basically a copy of the High Speed GMLAN Bus except that its use is reserved for chassis components. This implementation splits message congestion between two parallel buses helping to insure timely message transmission and reception. Sometimes communication is required between the Chassis High Speed GMLAN Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K17 Electronic Brake Control Module as the Gateway module. Since the Chassis High Speed GMLAN Bus and primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

Chassis High Speed DLC Bus (Circuits 1980 & 1981)

Between the X84 Data Link Connector (DLC) terminals 12 & 13 and the K56 Serial Data Gateway Module terminals 17 X1 & 18 X1, there is a high speed bus called the Chassis High Speed DLC Bus. The Chassis High Speed DLC Bus is similar to the Chassis High Speed GMLAN Bus. Between the GMLAN-High and GMLAN-Low circuits, there is a 120 Ω termination resistor internal to the K56 Serial Data Gateway Module. There is no terminating resistor at the DLC.

The K56 Serial Data Gateway Module uses its high speed microprocessor to gate signals between the Chassis High Speed DLC Bus and the Chassis High Speed GMLAN Bus.

Powertrain High Speed GMLAN Bus (Circuits 7493 & 7494) (if equipped)

Note: Continuity check cannot be performed between the X84 Data Link Connector and control modules on the Powertrain High Speed GMLAN Bus.

The Powertrain High Speed GMLAN Bus (or Powertrain Expansion Bus) is basically a copy of the High Speed GMLAN Bus except that its use is reserved for Powertrain components. The bus is optional based upon feature content. Sometimes communication is required between the Powertrain High Speed GMLAN

Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K20 Engine Control Module as the Gateway module. Since the Powertrain High Speed GMLAN Bus and the primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

Powertrain Sensor High Speed GMLAN Bus (Circuits 4498 & 4499) (if equipped)

Note: Continuity check cannot be performed between the X84 Data Link Connector and control modules on the Powertrain Sensor High Speed GMLAN Bus.

The Powertrain Sensor High Speed GMLAN Bus is basically a copy of the primary High Speed GMLAN Bus except that its use is reserved for Powertrain components. The bus is optional based upon feature content. Sometimes communication is required between the Powertrain Sensor High Speed GMLAN Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K20 Engine Control Module as the Gateway module. Since the Powertrain Sensor High Speed GMLAN Bus and the primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

Object High Speed GMLAN Bus (Circuits 3811 & 3813) (if equipped)

Note: Continuity check cannot be performed between the X84 Data Link Connector and control modules on the Object High Speed GMLAN Bus.

The Object High Speed GMLAN Bus is basically a copy of the High Speed GMLAN Bus except that its use is reserved for the enhanced safety system. This implementation is used to isolate the heavy communication among the enhanced safety system devices from the other vehicle buses, reducing congestion. The K124 Active Safety Control Module is connected to the Object High Speed GMLAN Bus as well as the primary High Speed GMLAN Bus, the Chassis High Speed GMLAN Bus, and the Low Speed GMLAN Bus. The K124 Active Safety Control Module acts as a Gateway module for all required communication between the Object High Speed GMLAN Bus devices and devices on these other vehicle buses. The Object High Speed GMLAN Bus operates in the same manner as the Chassis High Speed GMLAN and primary High Speed GMLAN buses and so the diagnostics are similar. The Object High Speed GMLAN Bus is physically partitioned into a Front Object Bus and a Rear Object Bus with each partition having its own communication enable circuit to activate the partition, but functional operation of both is identical. The Front Object Bus standard devices are the K124 Active Safety Control Module, the K109 Frontview Camera Module (or B174W Frontview Camera – Windshield), and the B233B Radar Sensor Module – Long Range. The Front Object Bus optional devices are the B233LF Radar Sensor Module – Short Range Left Front and the B233RF Radar Sensor Module – Short Range Right Front. The Rear Object Bus is optional and when present will have the K124 Active Safety Control Module, B233LR Radar Sensor Module – Short Range Left Rear, and B233RR Radar Sensor Module – Short Range Right Rear on the bus. All Object High Speed GMLAN Bus components are powered by the K124 Active Safety Control Module via the communication enable circuits, except the K109 Frontview Camera Module (or B174W Frontview Camera – Windshield) which is powered directly by battery.

Object High Speed DLC Bus (Circuits 2089 & 2090)

Between the X84 Data Link Connector (DLC) terminals 3 & 11 and the K56 Serial Data Gateway Module terminals 13 X1 & 14 X1, there is a high speed bus called the Object High Speed DLC Bus. The Object High Speed DLC Bus is similar to the Object High Speed GMLAN Bus. Between the GMLAN-High and GMLAN-Low circuits, there is a 120 Ω termination resistor internal to the K56 Serial Data Gateway Module. There is no terminating resistor at the DLC.

The K56 Serial Data Gateway Module uses its low speed microprocessor to gate signals between the Object High Speed DLC Bus and the Object High Speed GMLAN Bus.

Gateway Isolated High Speed GMLAN Bus (Circuits 1304 & 1305)

Note: Continuity check cannot be performed between the X84 Data Link Connector (or control modules on the primary High Speed GMLAN Bus) and control modules on the Gateway Isolated High Speed GMLAN Bus.

The Gateway Isolated High Speed GMLAN Bus is an extension of the primary High Speed GMLAN Bus except it is separated from the primary High Speed GMLAN Bus by the K56 Serial Data Gateway Module for cybersecurity protection. The K56 Serial Data Gateway Module verifies data messages being transmitted from the control modules on the Gateway Isolated High Speed GMLAN Bus back to the primary High Speed GMLAN Bus are good with valid transmitter messages. This bus does not terminate to the X84 Data Link Connector.

The Gateway Isolated High Speed GMLAN Bus consists of two twisted wires. One signal circuit is identified as GMLAN-High and the other signal circuit is identified as GMLAN-Low. At each end of the data bus there is a 120 Ω termination resistor between the GMLAN-High and GMLAN-Low circuits.

Gateway Expansion High Speed GMLAN Bus (Circuits 3935 & 3936)

Note: Continuity check cannot be performed between the X84 Data Link Connector (or control modules on the primary High Speed GMLAN Bus) and control modules on the Gateway Expansion High Speed GMLAN Bus.

The Gateway Expansion High Speed GMLAN Bus is not cybersecurity protected and does not terminate at the X84 Data Link Connector. This expansion bus is created to alleviate the throughput on the primary High Speed GMLAN Bus.

The Gateway Expansion High Speed GMLAN Bus consists of two twisted wires. One signal circuit is identified as GMLAN-High and the other signal circuit is identified as GMLAN-Low. At each end of the data bus there is a 120 Ω termination resistor between the GMLAN-High and GMLAN-Low circuits.

Ethernet Bus (if equipped)

At the core of the infotainment system is the Radio Ethernet Audio Video Bridging switch which communicates directly to each contributing Infotainment module terminator. The Ethernet harness consists of twisted pair wires from point to point. Each device on the Ethernet infotainment system sends/ receives data at 100 Mbit/s to/from a specified port at the A11 Radio. The Radio/Ethernet will also be used to program USB software update files to the devices connected to the Ethernet ports.

The A11 Radio is the Ethernet master. The Radio communicates with other devices and systems in the vehicle via GMLAN and LIN buses. Diagnostic Trouble Codes will be read on GMLAN to diagnose Ethernet, LIN and system faults. GMLAN will also be used for programming calibrations.

Media Oriented Systems Transport (MOST) Bus (Circuits 3997 & 3998) (if equipped)

The MOST Infotainment network is a dedicated high speed multimedia streaming data bus independent from GMLAN. The MOST Bus will be configured in a physical hardwired loop with each device within the bus sends and receives data on an assigned MOST addresses in a set order. Each device on the MOST Bus will be required to have twisted pair copper wires (2 transmit TX, 2 receive RX, and 1 electronic control line which is a 12 V wakeup signal line). The A11 Radio is the MOST Master and will monitor the bus for vehicle configuration, Infotainment data messages and errors on the bus. The MOST initialization consists of a short 100 ms low voltage pulse on the electronic control line (or MOST control line) connected to all devices contained on the MOST ring. This wakeup message once received by each device, will first respond with a generic device response. Once these initial responses on the MOST Bus are reported successfully without error to the A11 Radio, the second data request will record the MOST device addresses, their functionality requirements and capabilities within. The A11 Radio will learn this information and also record the address node sequence on the MOST Bus at this point. This node address list will now be stored within the A11 Radio as the MOST Bus configuration (called “Last Working MOST ID of Node 1 – 9” on scan tool data display).

When MOST receive, transmit, or control line faults are detected, transmit/receive messages will not received as expected from the wakeup request. The A11 Radio and the K74 Human Machine Interface Control Module will then perform diagnostics to isolate these MOST faults. If the MOST control line is shorted low to 0 V for excess amount of time, the A11 Radio will set a U2098 DTC and K74 Human Machine Interface Control Module will set a U0029 02 DTC. At this point the MOST Bus will be unable to communicate until the shorted MOST control line is repaired.

Once the shorted MOST control line diagnostics pass, the A11 Radio will attempt to resend the initial short pulse attempts up to 3 times on the MOST control line. If the expected responses are not received, the A11 Radio continues into a failure mode setting a U0028 DTC and will continue on to send one 300 ms long pulse, which will enable the furthest upstream transmitting device to become the surrogate MOST Master in this MOST fault/diagnostic mode. When the A11 Radio receives this new MOST Master identity, the surrogate MOST master device can be identified based on scan tool data parameter “Surrogate MOST Master Node Upstream Position”. The scan tool should be used to determine the MOST Bus configuration and direction by utilizing the “Last Working MOST ID of Node 1 – 9” parameters from the A11 Radio data display. When a fault is present, it will indicate the newly enabled “Surrogate MOST Master Node Upstream Position” from the A11 Radio. This will assist in determining where the MOST bus/control is at fault. The MOST device upstream from the surrogate MOST master device, transmit, receive, or control lines will be the suspect areas for diagnostics at this point. These faults can be associated with any of the MOST transmit, receive, or control line twisted copper wires or possibly an internal device fault.

The K74 Human Machine Interface Control Module will set a U0029 00 DTC when it diagnoses a MOST bus not communicating properly after one attempt. When the DTC U0029 00 is set by the K74 Human Machine Interface Control Module without the corresponding DTC U0028 from the A11 Radio, it will be an indication of an intermittent wiring/device condition.

FlexRay Bus (if equipped)

The FlexRay Bus is developed for safety related applications and higher data rate in real time application. The communication is time triggered. The FlexRay serial data network consists of two unshielded twisted wires to connect FlexRay nodes together. A FlexRay node is a device connected to a FlexRay Bus.

The FlexRay serial data network features 2 communication channels: channel A and channel B. Each channel may be operated at a data rate of up to 10 Mbit/s. FlexRay nodes can be connected to either both channels or a single channel. Each FlexRay channel consists of multiple branches. Each branch is a private bus. At each end of a branch, there is a 100 Ω terminating resistor connected between the pair of FlexRay serial data circuits. The terminating resistors can be external or internal to a FlexRay device.

The second FlexRay channel can be used as a redundant channel for fault toleration or to increase data rate of up to 20 Mbit/s. The dual channel configuration consists of two independent data channels for fault-tolerance. When one channel fails, the communication can still continue with reduced bandwidth.

Low Speed GMLAN Bus (Circuit 5060)

Note: Continuity check cannot be performed between the X84 Data Link Connector and control modules on the Low Speed GMLAN Bus.

Low Speed GMLAN Bus is used in applications where a high data rate is not required which allows for the use of less complex components. It is typically used for operator controlled functions where the response time requirements are slower than those required for dynamic vehicle control.

The Low Speed GMLAN Serial Data Network consists of a single wire, ground referenced bus with high side voltage drive. During on road vehicle operation data symbols (1’s and 0’s) are transmitted sequentially at the normal rate of 33.3 Kbit/s. For component programming only, a special high speed data mode of 83.3 Kbit/s may be used.

Unlike the high speed dual wire networks, the single wire low speed network does not use terminating resistors at either end of the network.

The data symbols to be transmitted over the bus are represented by different voltage signals on the bus. When the Low Speed GMLAN Bus is at rest and is not being driven, there is a low signal voltage of approximately 0.2 V. This represents a logic “1”. When a logic “0” is to be transmitted, the signal voltage is driven higher to around 4.0 V or higher.

Low Speed DLC Bus (Circuit 2100)

Between the X84 Data Link Connector (DLC) terminal 1 and the K56 Serial Data Gateway Module terminal 26 X1, there is a low speed bus called the Low Speed DLC Bus. The Low Speed DLC Bus is similar to the primary Low Speed GMLAN Bus.

The K56 Serial Data Gateway Module uses its low speed microprocessor to gate signals between the Low Speed DLC, the primary Low Speed GMLAN, and the Gateway Isolated Low Speed GMLAN Buses.

Gateway Isolated Low Speed GMLAN Bus (Circuit 1102)

Note: Continuity check cannot be performed between the X84 Data Link Connector (or control modules on the primary Low Speed GMLAN Bus) and control modules on the Gateway Isolated Low Speed GMLAN Bus.

The Gateway Isolated Low Speed GMLAN Bus is an extension of the primary Low Speed GMLAN Bus except it is separated from the primary Low Speed GMLAN Bus by the K56 Serial Data Gateway Module for cybersecurity protection. The K56 Serial Data Gateway Module verifies data messages being transmitted from the control modules on the Gateway Isolated Low Speed GMLAN Bus back to the primary Low Speed GMLAN Bus are good with valid transmitter messages. This bus does not terminate to the X84 Data Link Connector.

Local Interconnect Network (LIN) Bus

The Local Interconnect Network (LIN) Bus consists of a single wire with a transmission rate of 10.417 Kbit/s. This bus is used to exchange information between a master control module and other smart devices which provide supporting functionality. This type of configuration does not require the capacity or speed of either a High Speed GMLAN Bus or Low Speed GMLAN Bus and is thus relatively simpler.

The data symbols (1’s and 0’s) to be transmitted are represented by different voltage levels on the communication bus. When the LIN Bus is at rest and is not being driven, the signal is in a high voltage state of approximately Vbatt. This represents a logic “1”. When a logic “0” is to be transmitted, the signal voltage is driven low to about ground (0.0 V).

Communication Enable Circuit Description

Devices on High Speed GMLAN Bus enable or disable communication based on the voltage level of the Serial Data Communication Enable circuit or Accessory Wakeup Serial Data circuit. When the circuit voltage is high (around 12 V), communications are enabled. When the circuit is low, communications are disabled.

X84 Data Link Connector (DLC)

The X84 Data Link Connector is a standardized 16-cavity connector. Connector design and location is dictated by an industry wide standard, and is required to provide the following:

- Terminal 1: Low Speed GMLAN Serial Data #3 terminal (Low Speed DLC Bus)
- Terminal 3: High Speed GMLAN Serial Data (+)(13) terminal (Object High Speed DLC Bus)
- Terminal 4: Scan tool power ground terminal
- Terminal 5: Common signal ground terminal
- Terminal 6: High Speed GMLAN Serial Data (+)(11) terminal (High Speed DLC Bus)
- Terminal 11: High Speed GMLAN Serial Data (-)(13) terminal (Object High Speed DLC Bus)
- Terminal 12: High Speed GMLAN Serial Data (+)(12) terminal (Chassis High Speed DLC Bus)
- Terminal 13: High Speed GMLAN Serial Data (-)(12) terminal (Chassis High Speed DLC Bus)
- Terminal 14: High Speed GMLAN Serial Data (-)(11) terminal (High Speed DLC Bus)
- Terminal 16: Scan tool power, battery positive voltage terminal

Serial Data Reference

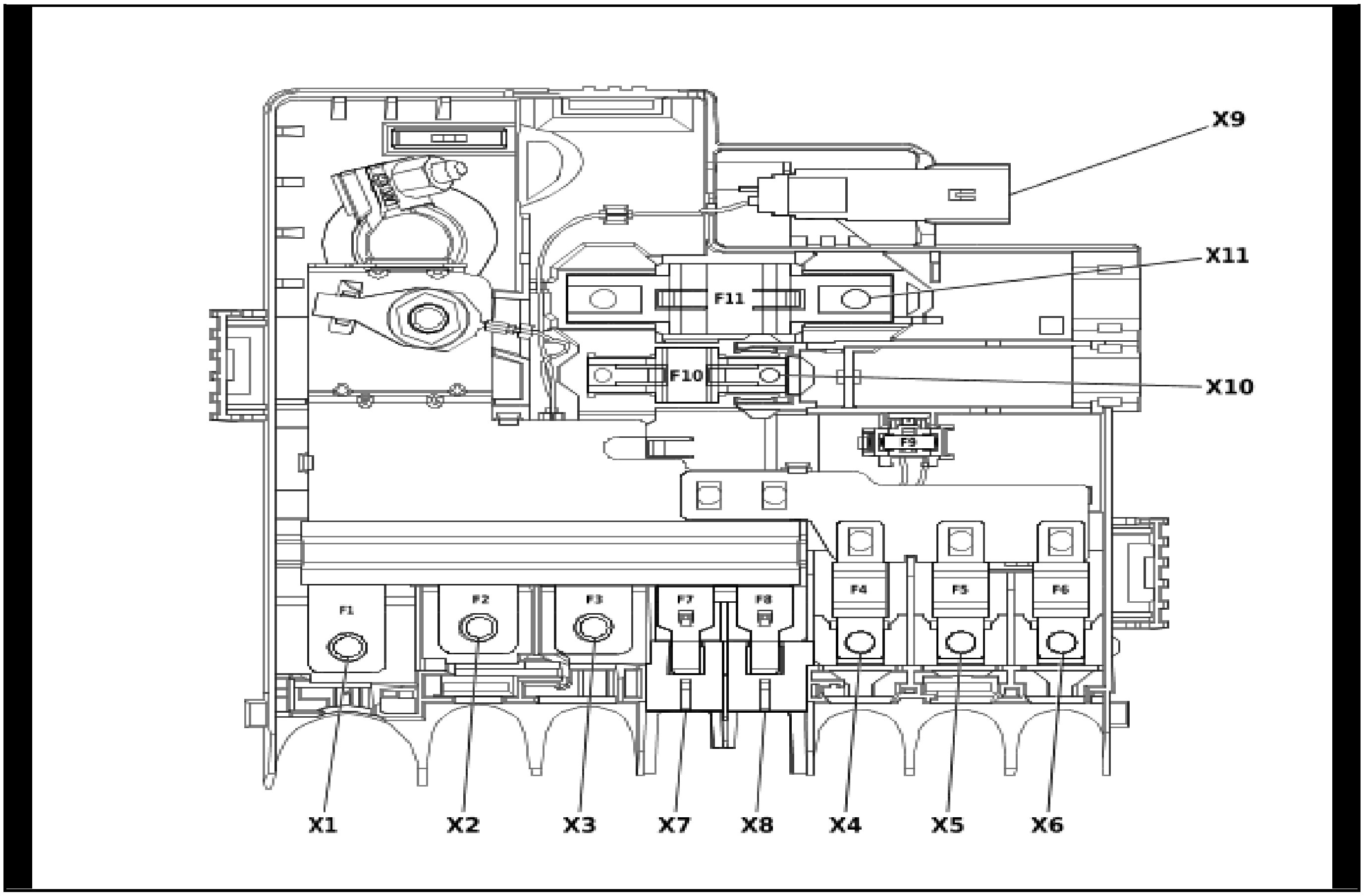
The scan tool communicates over the various buses on the vehicle. When a scan tool is installed on a vehicle, the scan tool will try to communicate with every device that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No Comm (or Not Connected) for that optional device. In order to avert misdiagnoses of No Communication with a specific device, refer to Data Link References for a list of devices and the buses they communicate with. Use schematics and specific vehicle build RPO codes to determine optional devices.

Electrical Component and Inline Harness Connector End Views

Component Locator

Electrical Center Identification Views

X50D Fuse Block - Battery Top View



5070128

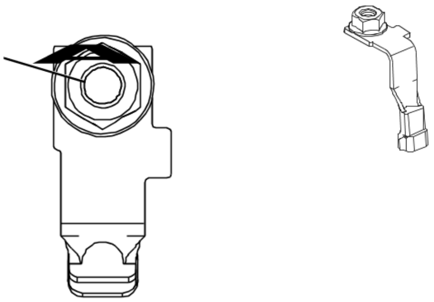
Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	—	F1BA	175A (LV3/ L82/L84/ L87) 250A (L3B/LM2)	• G13 Generator • X50A Fuse Block - Underhood
F2	—	F2BA	175A	• K43 Power Steering Control Module
F3	—	F3BA	400A	• M64 Starter Motor
F4	—	F4BA	100A	• E40 Electrical Auxiliary Heater (C32)
F5	—	F5BA	80A	• K34 Glow Plug Control Module (LM2)
F6	—	F6BA	80A	• G59 Engine Coolant Pump (L3B) • G10R Cooling Fan Motor - Right (LM2)
F7	—	F7BA	60A	• X51R Fuse Block - Instrument Panel Right
F8	—	F8BA	60A	• K160 Brake System Control Module

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F9	—	F9BA	5A	• B110 Battery Sensor Module (KL9) • K9 Body Control Module (-KL9)
F10	—	F10BA	60A	• X51B Fuse Block - Instrument Panel Auxiliary (LM2) • E35L Exterior Spot Lamp - Left (7X2/7X3/7X6/7X7) • E35R Exterior Spot Lamp - Right (7X2/7X3/7X6/7X7)
F11	—	F11BA	—	• Not Used

X50D Fuse Block - Battery X1



4249176

Connector Part Information

Harness Type: Generator
OEM Connector: 84386516
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way F Wire Entry Fuse Block

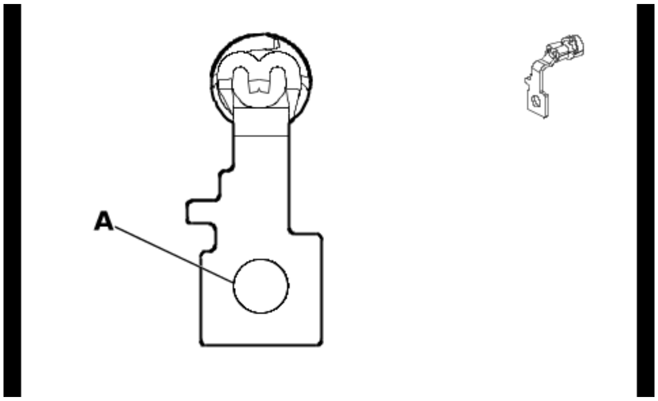
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	35	RD / YE	2	Battery Positive Voltage	I	—
	35	RD / GN	242	Battery Positive Voltage		—

X50D Fuse Block - Battery X2



5664311

Connector Part Information

Harness Type: Power Steering
OEM Connector: 84386514
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

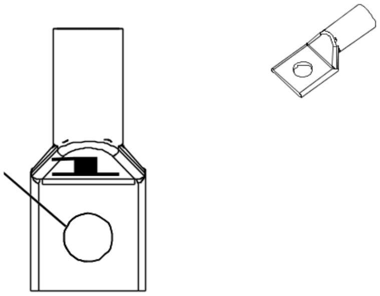
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD / VT	3542	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X3



3273653

Connector Part Information

Harness Type: Starter Motor
OEM Connector: 13516384
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

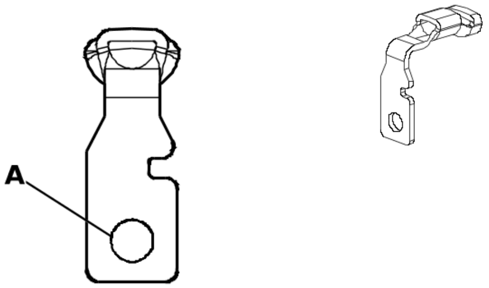
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	35	RD / YE	2	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X4 (C32)



5194789

Connector Part Information

Harness Type: Body
OEM Connector: 35085117
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

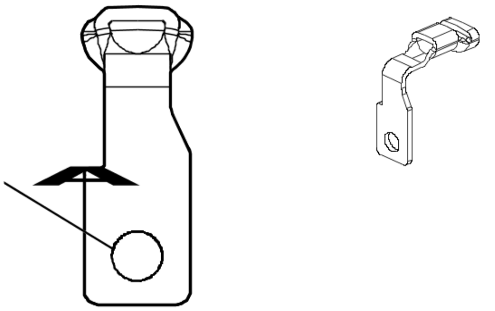
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X4 (C32)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	10	RD / GY	642	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X6 (L3B)



Connector Part Information

Harness Type: Engine
OEM Connector: 35085183
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

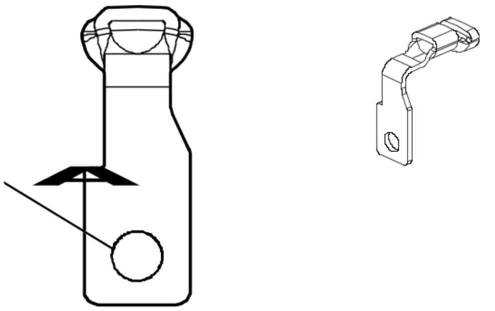
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X6 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	10	RD / BN	440	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X6 (LM2)



Connector Part Information

Harness Type: Engine
OEM Connector: 35085183
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

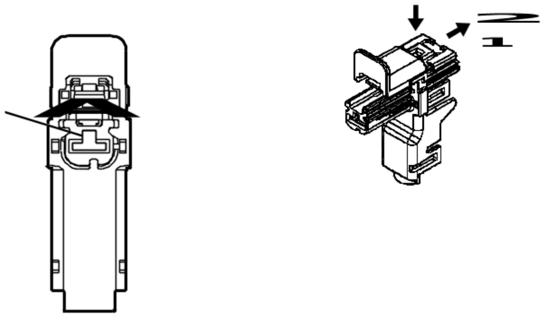
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	10	RD	642	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X7



4994183

Connector Part Information

Harness Type: Body
OEM Connector: 33297578
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way F 6.3 Series(BK)

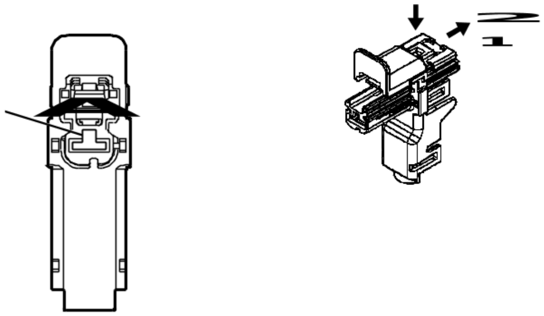
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

X50D Fuse Block - Battery X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD / GY	142	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X8



4994171

Connector Part Information

Harness Type: Body
OEM Connector: 33297579
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way F 6.3 Series(BU)

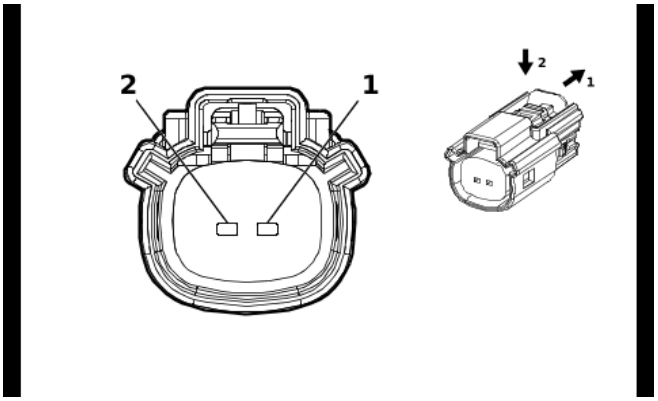
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

X50D Fuse Block - Battery X8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	6	RD / VT	1640	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X9



2474713

Connector Part Information

Harness Type: Body
OEM Connector: 33259367
Service Connector: 19352909
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

X50D Fuse Block - Battery X9

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2340	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—

X50D Fuse Block - Battery X10

—

Connector Part Information

Harness Type: Upfitter
OEM Connector: 13624367
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

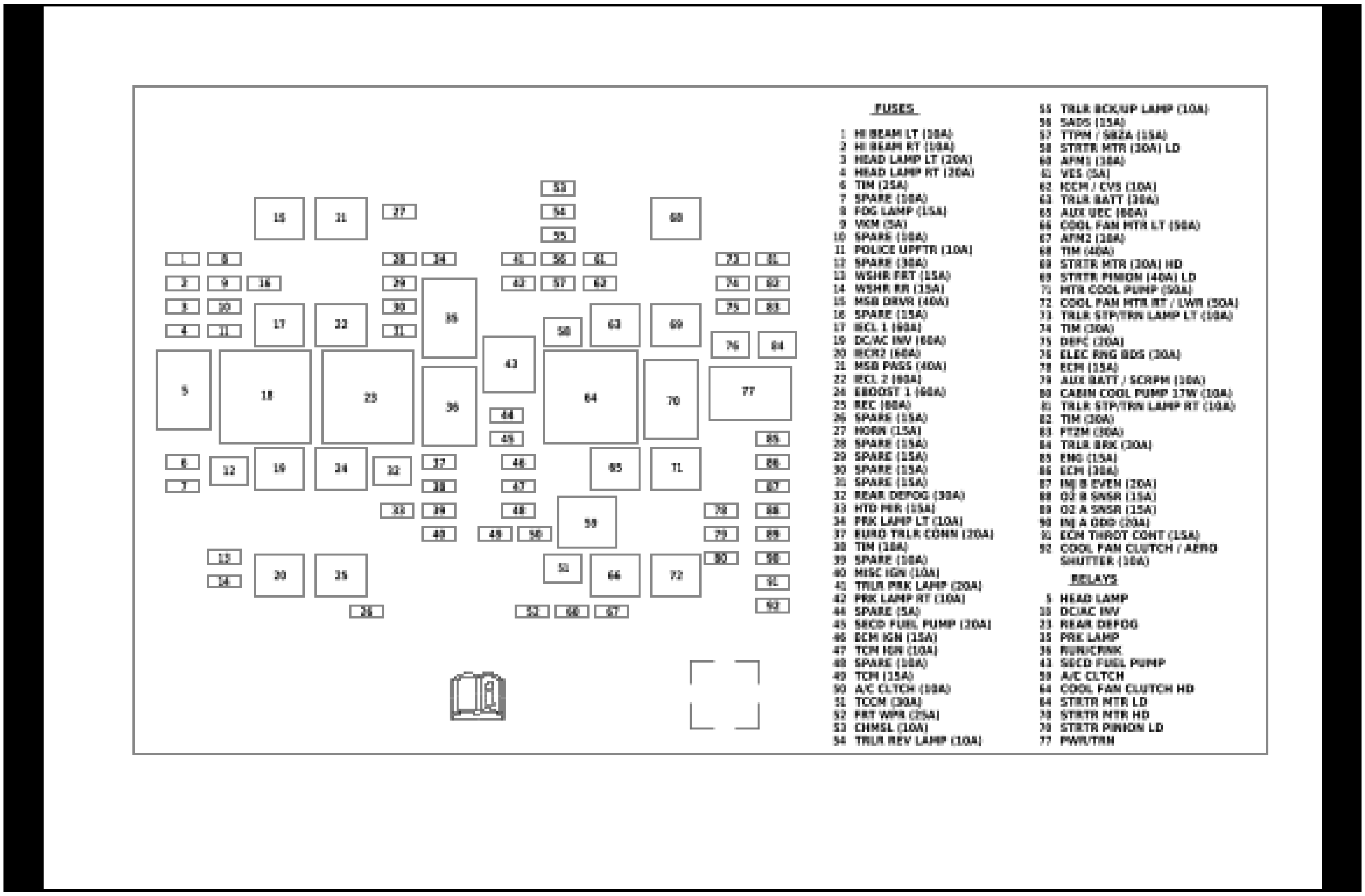
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50D Fuse Block - Battery X10

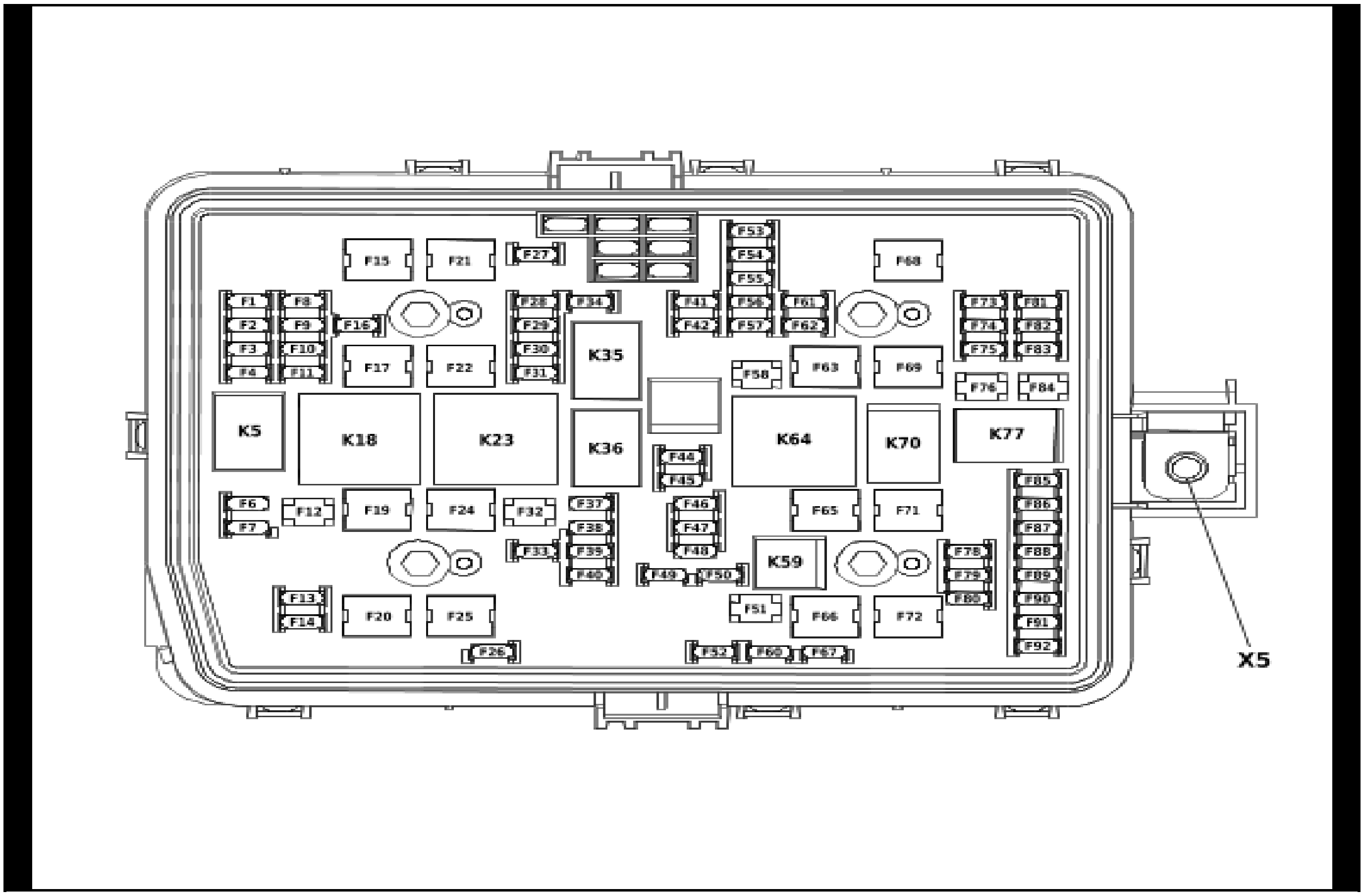
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD / BU	42	Battery Positive Voltage	I	—

X50A Fuse Block - Underhood Label


FUSES
1 HI BEAM LT (10A)
2 HI BEAM RT (10A)
3 HEAD LAMP LT (20A)
4 HEAD LAMP RT (20A)
6 TIM (25A)
7 SPARE (10A)
8 FOG LAMP (15A)
9 VKM (5A)
10 SPARE (10A)
11 POLICE UPFTR (10A)
12 SPARE (30A)
13 WSHR FRT (15A)
14 WSHR RR (15A)
15 MSB DRVR (40A)
16 SPARE (15A)
17 IECL 1 (60A)
19 DC/AC INV (60A)
20 IECR2 (60A)
21 MSB PASS (40A)
22 IECL 2 (60A)
24 EBOOST 1 (60A)
25 REC (80A)
26 SPARE (15A)
27 HORN (15A)
28 SPARE (15A)
29 SPARE (15A)
30 SPARE (15A)
31 SPARE (15A)
32 REAR DEFOG (30A)
33 HTD MIR (15A)
34 PRK LAMP LT (10A)
37 EURO TRLR CONN (20A)
38 TIM (10A)
39 SPARE (10A)
40 MISC IGN (10A)
41 TRLR PRK LAMP (20A)
42 PRK LAMP RT (10A)
44 SPARE (5A)
45 SECD FUEL PUMP (30A)
46 ECM IGN (15A)
47 TCM IGN (10A)
48 SPARE (10A)
49 TCM (15A)
50 A/C CLTCH (10A)
51 TCCM (30A)
52 FRT WPR (25A)
53 CHMSL (10A)
54 TRLR REV LAMP (10A)
55 TRLR BCK/UP LAMP (10A)
56 SADS (15A)
57 TTPM / SBZA (15A)
58 STRTR MTR (30A) LD
60 AFM1 (10A)
61 VES (5A)
62 ICCM / CVS (10A)
63 TRLR BATT (30A)
65 AUX UEC (60A)
66 COOL FAN MTR LT (50A)
67 AFM2 (10A)
68 TIM (40A)
69 STRTR MTR (30A) HD
69 STRTR PINION (40A) LD
71 MTR COOL PUMP (50A)
72 COOL FAN MTR RT / LWR (50A)
73 TRLR STP/TRN LAMP LT (10A)
74 TIM (30A)
75 DEFC (20A)
76 ELEC RNG BDS (30A)
78 ECM (15A)
79 AUX BATT / SCRPM (10A)
80 CABIN COOL PUMP 17W (10A)
81 TRLR STP/TRN LAMP RT (10A)
82 TIM (30A)
83 FT2M (30A)
84 TRLR BRK (30A)
85 ENG (15A)
86 ECM (30A)
87 INJ B EVEN (20A)
88 O2 B SNSR (15A)
89 O2 A SNSR (15A)
90 INJ A ODD (20A)
91 ECM THROT CONT (15A)
92 COOL FAN CLUTCH / AERO SHUTTER (10A)
RELAYS
5 HEAD LAMP
10 DC/AC INV
23 REAR DEFOG
35 PRK LAMP
36 RUN/CRNK
43 SECD FUEL PUMP
59 A/C CLTCH
64 COOL FAN CLUTCH HD
64 STRTR MTR LD
70 STRTR MTR HD
70 STRTR PINION LD
77 PWR/TRN

5044140

X50A Fuse Block - Underhood Top View


F15
F21
F27
F53
F54
F55
F68
F1
F8
F16
F2
F9
F3
F10
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F28
F34
F29
F30
F31
K35
F41
F56
F61
F42
F57
F62
F73
F81
F74
F82
F75
F83
F17
F22
F58
F63
F69
F76
F84
K5
K18
K23
K36
K64
K70
K77
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F6
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F12
F19
F24
F32
F37
F38
F39
F40
F33
F46
F47
F48
F65
F71
K59
F78
F79
F80
F49
F50
F13
F14
F20
F25
F51
F66
F72
F26
F52
F60
F67
X5

5041384

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	HI BEAM LT	F1UA	10A	• E13LA Headlamp Assembly - Left
F2	HI BEAM RT	F2UA	10A	• E13RA Headlamp Assembly - Right
F3	HEAD LAMP LT	F3UA	20A	• E13LA Headlamp Assembly - Left
F4	HEAD LAMP RT	F4UA	20A	• E13RA Headlamp Assembly - Right
F6	TIM	F6UA	25A	• Not Used
F7	SPARE	F7UA	10A	• Not Used
F8	FOG LAMP	F8UA	15A	• E29LF Fog Lamp - Left Front (S3U/T3U) • E29RF Fog Lamp - Right Front (S3U/T3U)
F9	VKM	F9UA	5A	• B342A UHF Low Energy Remote Control Access Sensor Transceiver 1 (BOP) • B342B UHF Low Energy Remote Control Access Sensor Transceiver 2 (BOP) • B342C UHF Low Energy Remote Control Access Sensor Transceiver 3 (BOP) • B342D UHF Low Energy Remote Control Access Sensor Transceiver 4 (BOP) • K183 UHF Short Range Low Energy Remote Control Access Transceiver (BOP)
F10	SPARE	F10UA	10A	• Not Used
F11	POLICE UPFTR	F11UA	10A	• Not Used

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F12	SPARE	F12UA	30A	• Not Used
F13	WSHR FRT	F13UA	15A	• G24 Windshield Washer Pump
F14	WSHR RR	F14UA	15A	• Not Used
F15	MSB DRVR	F15UA	40A	• Not Used
F16	SPARE	F16UA	15A	• Not Used
F17	IECL 1	F17UA	60A	• X51L Fuse Block - Instrument Panel Left (KA1/QT5)
F19	DC/AC INV	F19UA	60A	• T1 Accessory DC/AC Power Inverter Module (KI4/KI5)
F20	IECR2	F20UA	60A	• X51R Fuse Block - Instrument Panel Right
F21	MSB PASS	F21UA	40A	• Not Used
F22	IECL 2	F22UA	60A	• X51L Fuse Block - Instrument Panel Left (BTM/A48)
F24	EBOOST 1	F24UA	60A	• K160 Brake System Control Module • X140
F25	REC	F25UA	60A	• Not Used
F26	SPARE	F26UA	15A	• Not Used
F27	HORN	F27UA	15A	• P12 Horn
F28	SPARE	F28UA	15A	• Not Used
F29	SPARE	F29UA	15A	• Not Used
F30	SPARE	F30UA	15A	• Not Used
F31	SPARE	F31UA	15A	• Not Used
F32	REAR DEFOG	F32UA	30A	• E18 Rear Defogger Grid
F33	HTD MIR	F33UA	15A	• E17D Outside Rearview Mirror Glass - Driver (DLF/DEZ) • E17P Outisde Rearview Mirror Glass - Passenger (DLF/DEZ)
F34	PRK LAMP LT	F34UA	10A	• E2LM Side Marker Lamp - Left Middle (DPO/DQS) • E13LA Headlamp Assembly - Left • E42L Tail Lamp Assembly - Left
F37	EURO TRLR CONN	F37UA	20A	• Not Used
F38	TIM	F38UA	10A	• Not Used
F39	SPARE	F39UA	10A	• Not Used
F40	MISC IGN	F40UA	10A	• X51B Fuse Block - Instrument Panel Auxiliary
F41	TRLR PRK LAMP	F41UA	20A	• X88 Trailer Connector (Z82-U1D)
F42	PRK LAMP RT	F42UA	10A	• E2RM Side Marker Lamp - Right Middle (DPO/DQS) • E13RA Headlamp Assembly - Right • E42R Tail Lamp Assembly - Right
F44	SPARE	F44UA	5A	• Not Used
F45	SECO FUEL PUMP	F45UA	20A	• Not Used
F46	ECM IGN	F46UA	15A	• K20 Engine Control Module • K34 Glow Plug Control Module (LM2) • K68 Trailer Lighting Control Module (U1D) • K111 Fuel Pump Driver Control Module • K115 Reductant Control Module (LM2) • K160 Brake System Control Module

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F47	TCM IGN	F47UA	10A	• M26 Front Axle Engagement Actuator (NP0/NQH) • K71 Transmission Control Module (MQB/MQE) • Q8 Control Solenoid Valve Assembly (MYC)
F48	SPARE	F48UA	10A	• Not Used
F49	TCM IGN	F49UA	15A	• G5 Transmission Fluid Pump - Electric/ Auxiliary (MQB)
F50	A/C CLTCH	F50UA	10A	• Q2 A/C Compressor Clutch
F51	TCCM	F51UA	30A	• K69 Transfer Case Control Module (NP0/NQH)
F52	FRT WPR	F52UA	25A	• KR12B Windshield Wiper Relay • KR12C Windshield Wiper Speed Control Relay
F53	CHMSL	F53UA	10A	• E6 Center High Mounted Stop Lamp
F54	TRLR REV LAMP	F54UA	10A	• A10 Inside Rearview Mirror (DD8/DRZ) • A11 Radio • E42L Tail Lamp Assembly - Left • E42R Tail Lamp Assembly - Right
F55	TRLR BCK/UP LAMP	F55UA	10A	• X88 Trailer Connector ((Z82/8S3)-U1D) • P3 Backup Alarm (8S3)
F56	SADS	F56UA	15A	• K19 Suspension Control Module (Z45)
F57	TTPM/SBZA	F57UA	15A	• B218L Side Object Sensor Module - Left (UKC) • B218R Side Object Sensor Module - Right (UKC) • K214 Trailer Tire Pressure Indicator Module (PTT)
F58	STRTR MTR	F58UA	30A	• KR27 Starter Relay
F60	AFM1	F60UA	10A	• K20 Engine Control Module (L82/L84/L87)
F61	VES	F61UA	5A	• Not Used
F62	ICCM/CVS	F62UA	10A	• Q13 Evaporative Emission Vent Solenoid Valve (-LM2)
F63	TRLR BATT	F63UA	30A	• X88 Trailer Connector
F65	AUX UEC	F65UA	60A	• X50B Fuse Block - Underhood Auxiliary (LM2)
F66	COOL FAN MTR LT	F66UA	50A	• G10L Cooling Fan Motor - Left
F67	AFM2	F67UA	10A	• K20 Engine Control Module (L82/L84/L87)
F68	TIM	F68UA	40A	• Not Used
F69	STRTR PINION	F69UA	40A	• KR27C Starter Pinion Solenoid Actuator Relay
F71	MTR COOL PUMP	F71UA	50A	• G10R Cooling Fan Motor - Right (L3B/LM2)
F72	COOL FAN MTR RT/LWR	F72UA	50A	• G10R Cooling Fan Motor - Right (L3B/L82/L84/ L87/LV3) • G10LW Cooling Fan Motor - Lower (L3B/LM2)
F73	TRLR STP/TRN LAMP LT	F73UA	10A	• X88 Trailer Connector (Z82-U1D)
F74	TIM	F74UA	30A	• K68 Trailer Lighting Control Module (U1D)
F75	DEFC	F75UA	20A	• K115 Reductant Control Module (LM2)
F76	ELEC RNG BOS	F76UA	30A	• K4 Assist Step Control Module (BRS)
F78	ECM	F78UA	15A	• K20 Engine Control Module
F79	AUX BATT/ SCRPM	F79UA	10A	• Not Used
F80	CABIN COOL PUMP 17W	F80UA	10A	• G17 Heater Coolant Pump (LM2) • KR33 Auxiliary Heater Coolant Pump Relay (L84/L87)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F81	TRLR STP/TRN LAMP RT	F81UA	10A	• X88 Trailer Connector (Z82-U1D)
F82	TIM	F82UA	30A	• K68 Trailer Lighting Control Module (U1D)
F83	FTZM	F83UA	30A	• K111 Fuel Pump Driver Control Module
F84	TRLR BRK	F84UA	30A	• K133 Trailer Brake Power Control Module (JL1) • W24 Blunt Cut - Trailer Brakes Provision
F85	ENG	F85UA	15A	• B75C Multifunction Intake Air Sensor (L3B/LM2/LV3) • K20 Engine Control Module (L3B) • Q97B Engine Coolant Flow Control Valve - Block (L3B)
F86	ECM	F86UA	30A	• K20 Engine Control Module
F87	INJ B EVEN	F87UA	20A	• K20 Engine Control Module • T8B Ignition Coil 2 (L82/L84/L87/LV3) • T8D Ignition Coil 4 (L82/L84/L87/LV3) • T8F Ignition Coil 6 (L82/L84/L87/LV3) • T8H Ignition Coil 8 (L82/L84/L87)
F88	O2 B SNSR	F88UA	15A	• B52B Heated Oxygen Sensor 2 (L3B) • B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87) • B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87) • B75C Multifunction Intake Air Sensor (L82/L84/L87) • B198 Fuel Composition Sensor (FHS) • K20 Engine Control Module (L82/L84/L87/LV3) • KR18 Charge Air Cooler Coolant Pump Relay (LM2)
F89	O2 A SNSR	F89UA	15A	• B52A Heated Oxygen Sensor 1 (L3B) • B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3) • B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3) • B52F Heated Oxygen Sensor Bank 2 Sensor 2 (LV3) • G58 Evaporative Emission Purge Pump (L3B) • M129A Intake Camshaft Porfile Actuator 1 (L3B) • M129B Intake Camshaft Profile Actuator 2 (L3B) • M129C Intake Camshaft Profile Actuator 3 (L3B) • M129D Intake Camshaft Profile Actuator 4 (L3B) • M130B Exhaust Camshaft Profile Actuator 2 (L3B) • M130C Exhaust Camshaft Profile Actuator 3 (L3B) • Q12 Evaporative Emission Purge Solenoid Valve (-LM2) • Q40 Turbocharger Bypass Solenoid Valve (L3B) • Q43 Valve Lifter Oil Manifold Assembly (LV3) • Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3) • Q97B Engine Coolant Flow Control Valve - Block (LM2)

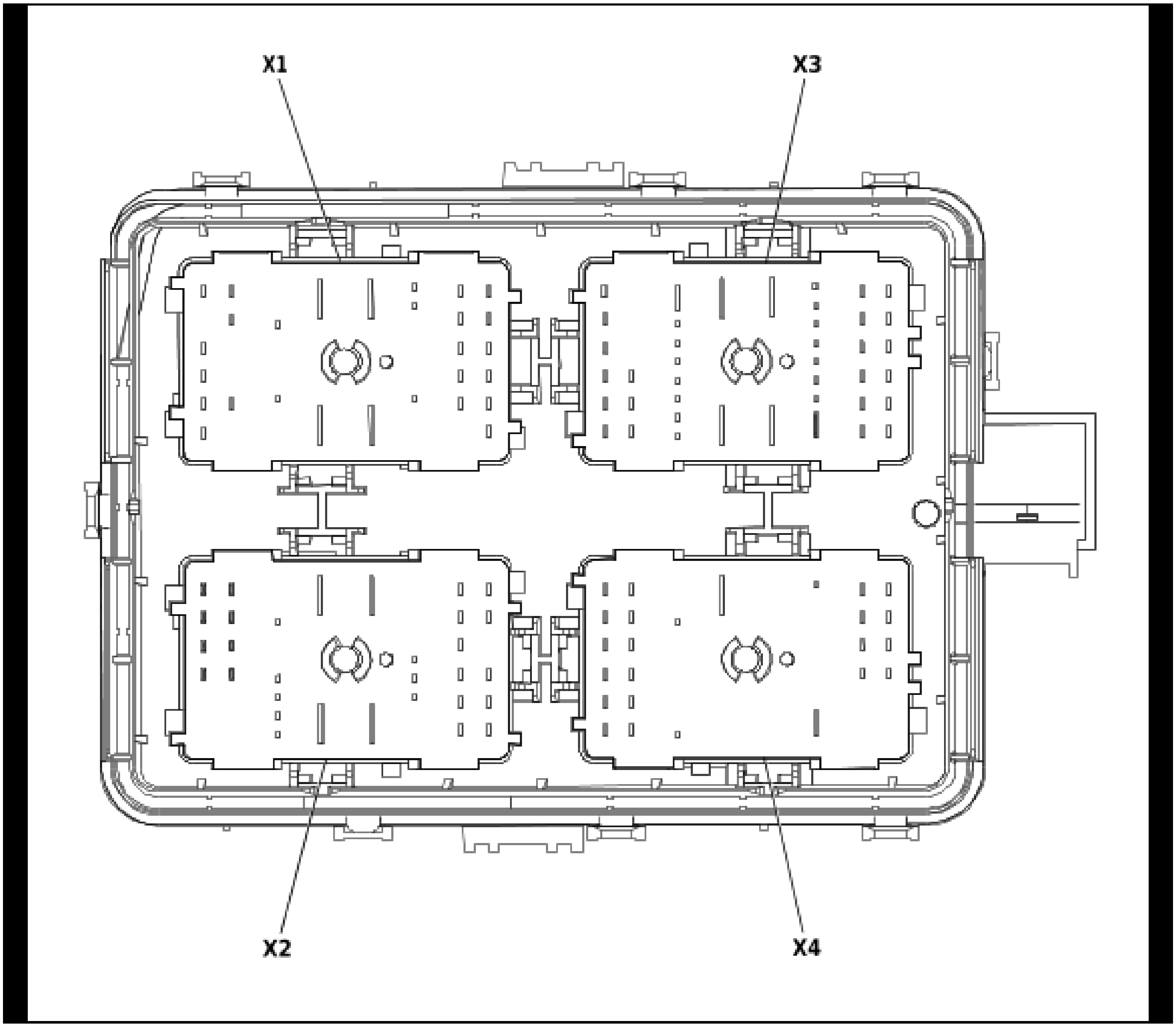
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F90	INJ A ODD	F90UA	20A	• K20 Engine Control Module • T8A Ignition Coil 1 • T8B Ignition Coil 2 (L3B) • T8C Ignition Coil 3 • T8D Ignition Coil 4 (L3B) • T8E Ignition Coil 5 (-L3B) • T8G Ignition Coil 7 (-L3B-LV3)
F91	ECM THROT CONT	F91UA	15A	• K20 Engine Control Module (L82/L84/L87/LV3)
F92	COOL FAN CLUTCH/AERO SHUTTER	F92UA	10A	• M96A Active Grille Air Shutter 1 Actuator • M96B Active Grille Air Shutter 2 Actuator (WMI)
Relays				
K5	HEAD LAMP	KR50 Headlamp Relay	—	• F3UA • F4UA
K18	DC/AC INV	KR80 Accessory Relay	—	• F19UA
K23	REAR DEFOG	KR5 Rear Defogger Relay	—	• F32UA • F33UA
K35	PRK LAMP	KR53 Park Lamps Relay	—	• F34UA • F41UA • F42UA
K36	RUN/CRNK	KR73 Ignition Main Relay	—	• F37UA • F38UA • F39UA • F40UA • F44UA • F46UA • F47UA • F48UA
K43	SECD FUEL PUMP	—	—	• Not Used
K59	A/C CLTCH	KR29 A/C Compressor Clutch Relay	—	• F50UA
K64	STRTR MTR LD	KR27 Starter Motor	—	• M64 Starter Motor
K70	STRTR PINION LD	KR27C Starter Pinion Solenoid Actuator Relay	—	• M64 Starter Motor (KL9)
K77	PWR/TRN	KR75 Engine Controls Ignition Relay	—	• F60UA • F67UA • F85UA • F86UA • F87UA • F88UA • F89UA • F90UA • F91UA • F92UA • KR29 A/C Compressor Clutch Relay • KR33 Auxiliary Heater Coolant Pump Relay

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
—	—	KR3 Horn Relay	—	• F27UA
—	—	KR6 Rear Window Washer Pump Relay	—	• F14UA
—	—	KR11 Windshield Washer Pump Relay	—	• F13UA
—	—	KR12B Windshield Wiper Relay	—	• M75 Windshield Wiper Motor
—	—	KR12C Windshield Wiper Speed Control Relay	—	• M75 Windshield Wiper Motor
—	—	KR33 Auxiliary Heater Coolant Pump	—	• G17 Heater Coolant Pump (KL9)
—	—	KR46 Front Fog Lamp Relay	—	• F8UA
—	—	KR48 Headlamp High Beam Relay	—	• F1UA • F2UA
—	—	KR53 Park Lamps Relay	—	• F34UA • F41UA • F42UA
—	—	KR59 Stop Lamp Relay	—	• F53UA
—	—	KR61 Trailer Backup Lamps Relay	—	• F54UA • F55UA
—	—	KR63L Trailer Stop/Turn Signal Lamp Relay - Left	—	• F73UA
—	—	KR63R Trailer Stop/Turn Signal Lamp Relay - Right	—	• F81UA

X50A Fuse Block - Underhood Bottom View



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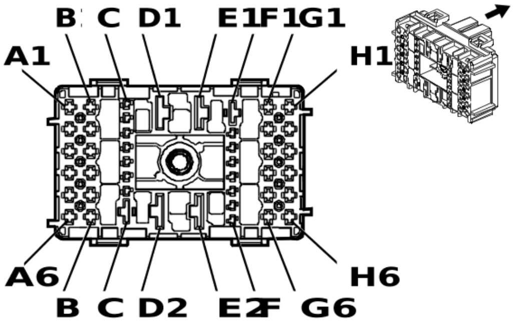
X50A Fuse Block - Underhood X1



4994109

Connector Part Information

Harness Type: Body
OEM Connector: 33384590
Service Connector: 19370824
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84779405	J-35616-35 (VT)	J-38125-212
III	Not required	J-35616-22 (RD)	No Tool Required

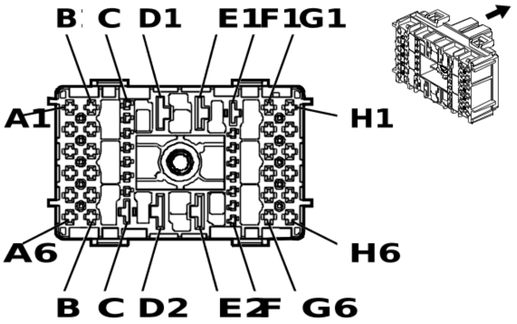
X50A Fuse Block - Underhood X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.5	YE / BN	2229	Left Headlamp Relay Control	II	—
A4	0.5	BK	250	Ground	II	—
A5 - B4	—	—	—	Not Occupied	—	—
B5	0.5	GY / VT	228	Windshield Washer Pump Control	II	—
B6 - C2	—	—	—	Not Occupied	—	—
C3	0.35	WH / GN	4628	DC/AC Inverter Relay Control	I	—
C4 - C6	—	—	—	Not Occupied	—	—
C7	0.35	BN / GY	2268	Windshield Washer Relay Control	I	—
C8	—	—	—	Not Occupied	—	—
D1	10	BN / BK	4629	DC/AC Inverter Control	III	—
D2	10	RD / WH	342	Battery Positive Voltage	III	—
E1	10	RD / YE	442	Battery Positive Voltage	III	—
E2 - F1	—	—	—	Not Occupied	—	—
F2	0.5	BN / VT	193	Rear Defogger Relay Control	I	—
F3 - F5	—	—	—	Not Occupied	—	—
F6	0.35	WH / VT	860	Windshield Wiper Switch High Signal	I	—
F7 - G1	—	—	—	Not Occupied	—	—
G2	2.5	BN / VT	293	Rear Defogger Grid Control	II	—
G3	0.5	BN / YE	2267	Outside Rearview Mirror Heater Control	II	—

X50A Fuse Block - Underhood X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
G4	0.35	GN / VT	5199	Run/Crank Relay Coil Control	II	—
G5	2	BK	150	Ground	II	—
G6	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	II	—
H1 - H3	—	—	—	Not Occupied	—	—
H4	0.35	VT / WH	239	Run/Crank Ignition 1 Voltage	II	—
H5	2	WH	92	Windshield Wiper Motor High Speed Control	II	—
H6	2	YE / BN	95	Windshield Wiper Motor Low Speed Control	II	—

X50A Fuse Block - Underhood X2



4994132

Connector Part Information

Harness Type: Body
OEM Connector: 33384594
Service Connector: 19371174
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84779405	J-35616-35 (VT)	J-38125-212
III	Not required	J-35616-22 (RD)	No Tool Required

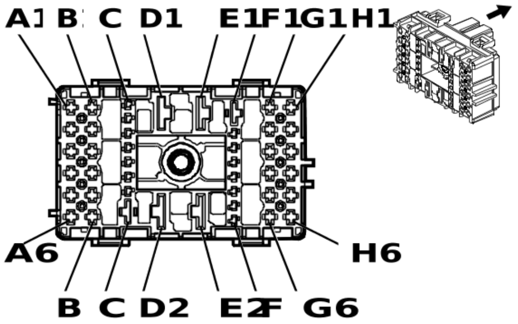
X50A Fuse Block - Underhood X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.75	WH	711	Left Headlamp High Beam Control	II	—
A4	0.75	WH	311	Right Headlamp High Beam Control	II	—
A5	0.75	YE	2227	Left Headlamp Control	II	—
A6	0.75	YE / GY	2226	Right Headlamp Control	II	—
B1 - B2	—	—	—	Not Occupied	—	—
B3	0.5	BN / VT	2234	Front Fog Lamp Control	II	—
B4	0.5	RD / GN	2340	Battery Positive Voltage	II	—
B5 - B6	—	—	—	Not Occupied	—	—
C1	0.5	BU / WH	5186	Left Trailer Turn Signal Lamp Control	I	—
C2	0.5	YE / GY	5187	Right Trailer Turn Signal Lamp Control	I	—
C3	0.5	BN / WH	1317	Fog Lamp Relay Control	I	—
C4	0.35	BN / VT	1969	Headlamp High Beam Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD / GY	2042	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD / VT	2142	Battery Positive Voltage	III	—
F1	—	—	—	Not Occupied	—	—
F2	0.5	VT / WH	5065	Stop Lamp Relay Coil Control	I	—
F3	0.35	BU / BN	38	Backup Lamp Relay Control	I	—

X50A Fuse Block - Underhood X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F4	0.35	BN / WH	28	Horn Relay Control	I	—
F5 - F8	—	—	—	Not Occupied	—	—
G1	0.75	BN / GY	29	Horn Control	II	—
G2	0.35	GN / WH	24	Backup Lamp Control	II	—
G3 - G6	—	—	—	Not Occupied	—	—
H1	0.35	VT / GY	1054	Stop Lamp Control	II	—
H2	0.5	VT / GY	709	Left Park Lamp Control	II	—
H3	0.5	VT / GY	709	Left Park Lamp Control	II	—
H4	—	—	—	Not Occupied	—	—
H5	0.5	GY / BN	309	Right Park Lamp Control	II	—
H6	0.35	BU	45	Park Lamp Relay Control	II	—

X50A Fuse Block - Underhood X3 (L3B)



4992608

Connector Part Information

Harness Type: Engine
OEM Connector: 33384584
Service Connector: 19371176
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84764078	J-35616-40 (BU)	J-38125-556
III	84779405	J-35616-35 (VT)	J-38125-557
IV	Not required	J-35616-22 (RD)	No Tool Required

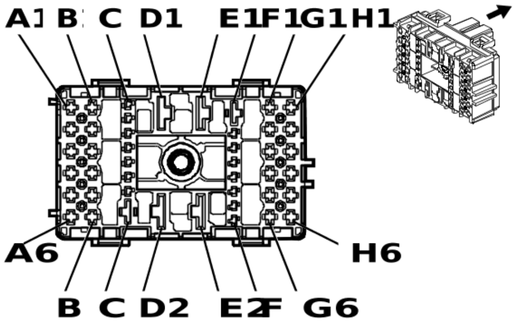
X50A Fuse Block - Underhood X3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	III	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	III	—
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN / GN	59	A/C Compressor Clutch Control	III	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	III	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	III	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD / GY	1342	Battery Positive Voltage	III	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.75	BK	4450	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD / WH	342	Battery Positive Voltage	IV	—
E1	10	RD	642	Battery Positive Voltage	IV	—
E2	10	RD / VT	842	Battery Positive Voltage	IV	—
F1	2.5	YE / GN	4358	Starter Pinion Solenoid Voltage	II	—
F2	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	I	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—

X50A Fuse Block - Underhood X3 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—
F5 - F6	—	—	—	Not Occupied	—	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8	—	—	—	Not Occupied	—	—
G1	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
G2 - G3	—	—	—	Not Occupied	—	—
G4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	III	—
G5	1	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
G6	—	—	—	Not Occupied	—	—
H1	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—
H2	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—
H3	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
H4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	III	—
H5 - H6	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X3 (L82)



4992608

Connector Part Information

Harness Type: Engine

OEM Connector: 33384584

Service Connector: 19371176

Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84779405	J-35616-35 (VT)	J-38125-212
III	84779405	J-35616-35 (VT)	J-38125-557
IV	Not required	J-35616-22 (RD)	No Tool Required

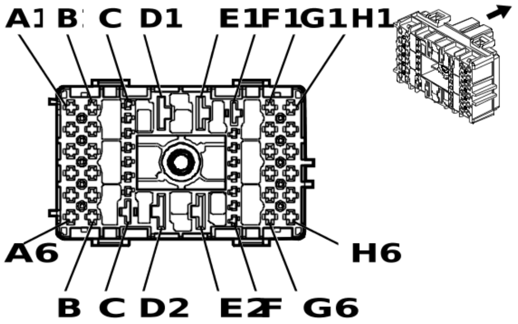
X50A Fuse Block - Underhood X3 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN / GN	59	A/C Compressor Clutch Control	II	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	III	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	II	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD / GY	1342	Battery Positive Voltage	III	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	1	BK	4450	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5	0.5	VT / YE	3854	Cabin Heater Coolant Pump Motor Control	I	—
C6	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—
C7	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—
C8 - D1	—	—	—	Not Occupied	—	—
D2	10	RD / WH	342	Battery Positive Voltage	IV	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD / GY	642	Battery Positive Voltage	IV	—

X50A Fuse Block - Underhood X3 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F1	—	—	—	Not Occupied	—	—
F2	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	I	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—
F5 - F6	—	—	—	Not Occupied	—	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8 - G1	—	—	—	Not Occupied	—	—
G2	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
G3	—	—	—	Not Occupied	—	—
G4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	II	—
G5	1	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
G6	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
H1	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—
H2	1	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
H3	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
H4 - H5	—	—	—	Not Occupied	—	—
H6	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—

X50A Fuse Block - Underhood X3 (L84/L87)



4992608

Connector Part Information

Harness Type: Engine
OEM Connector: 33384584
Service Connector: 19371176
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84764078	J-35616-40 (BU)	J-38125-556
III	84779405	J-35616-35 (VT)	J-38125-212
IV	84779405	J-35616-35 (VT)	J-38125-557
V	Not required	J-35616-22 (RD)	No Tool Required

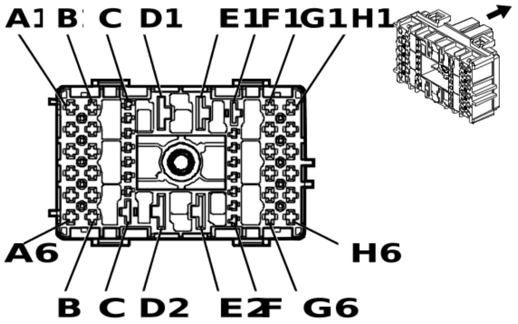
X50A Fuse Block - Underhood X3 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	III	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	III	—
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN / GN	59	A/C Compressor Clutch Control	III	—
A5	0.75	RD / VT	7940	Battery Positive Voltage	III	—
A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	IV	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	III	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD / GY	1342	Battery Positive Voltage	IV	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	1	BK	4450	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5	—	—	—	Not Occupied	—	—
C6	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—
C7	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—
C8 - D1	—	—	—	Not Occupied	—	—
D2	10	RD / WH	342	Battery Positive Voltage	V	—

X50A Fuse Block - Underhood X3 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
E1	—	—	—	Not Occupied	—	—
E2	10	RD / GY	642	Battery Positive Voltage	V	—
F1	2.5	YE / GN	4358	Starter Pinion Solenoid Voltage	II	—
F2	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	I	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—
F5	—	—	—	Not Occupied	—	—
F6	0.5	YE / BU	5126	Coolant Pump Control	I	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8 - G1	—	—	—	Not Occupied	—	—
G2	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	III	—
G3	—	—	—	Not Occupied	—	—
G4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	III	—
G5	1	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
G6	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
H1	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	IV	—
H2	1	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	III	—
H3	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
H4 - H5	—	—	—	Not Occupied	—	—
H6	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—

X50A Fuse Block - Underhood X3 (LM2)



4992608

Connector Part Information

Harness Type: Engine
OEM Connector: 33384584
Service Connector: 19371176
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84764079	J-35616-22 (RD)	J-38125-11A
III	84779405	J-35616-35 (VT)	J-38125-215A
IV	84779405	J-35616-35 (VT)	J-38125-557
V	Not required	J-35616-22 (RD)	No Tool Required

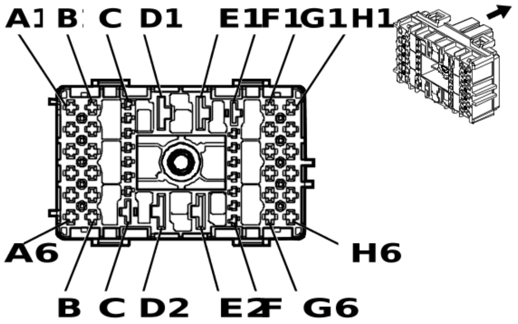
X50A Fuse Block - Underhood X3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	IV	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	IV	—
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN / GN	59	A/C Compressor Clutch Control	IV	—
A5	0.75	RD / VT	7940	Battery Positive Voltage	IV	—
A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	IV	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	IV	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD / GY	1342	Battery Positive Voltage	IV	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.5	BK	4450	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5 - C8	—	—	—	Not Occupied	—	—
D1	10	RD / VT	4040	Battery Positive Voltage	V	—
D2	10	RD / WH	342	Battery Positive Voltage	V	—
E1	—	—	—	Not Occupied	—	—
E2	5	RD / VT	842	Battery Positive Voltage	II	—

X50A Fuse Block - Underhood X3 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F1 - F2	—	—	—	Not Occupied	—	—
F3	0.75	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—
F5	—	—	—	Not Occupied	—	—
F6	0.5	YE / BU	5126	Coolant Pump Control	I	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8	—	—	—	Not Occupied	—	—
G1	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	IV	—
G2	—	—	—	Not Occupied	—	—
G3	2.5	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	IV	—
G4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	IV	—
G5 - G6	—	—	—	Not Occupied	—	—
H1	2.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	IV	—
H2	—	—	—	Not Occupied	—	—
H3	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	IV	—
H4	—	—	—	Not Occupied	—	—
H5	4	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
H6	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X3 (LV3)



4992608

Connector Part Information

Harness Type: Engine
OEM Connector: 33384584
Service Connector: 19371176
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84779405	J-35616-35 (VT)	J-38125-557
III	Not required	J-35616-22 (RD)	No Tool Required

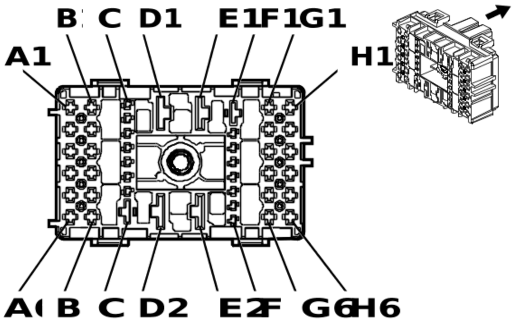
X50A Fuse Block - Underhood X3 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
A2	0.5 0.5	VT / BK VT / BK	2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	II	— —
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN / GN	59	A/C Compressor Clutch Control	II	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	II	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	II	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD / GY	1342	Battery Positive Voltage	II	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.5	BK	4450	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD / WH	342	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD / GY	642	Battery Positive Voltage	III	—
F1 - F2	—	—	—	Not Occupied	—	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—

X50A Fuse Block - Underhood X3 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F5 - F8	—	—	—	Not Occupied	—	—
G1	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
G2 - G3	—	—	—	Not Occupied	—	—
G4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	II	—
G5	1	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
G6	—	—	—	Not Occupied	—	—
H1	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
H2	1	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
H3	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
H4 - H5	—	—	—	Not Occupied	—	—
H6	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—

X50A Fuse Block - Underhood X4



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Connector Part Information

Harness Type: Chassis
OEM Connector: 33384574
Service Connector: 19371188
Description: 44 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369711	J-35616-14 (GN)	J-38125-560A
II	84764079	J-35616-22 (RD)	J-38125-11A
III	84779405	J-35616-35 (VT)	J-38125-212
IV	84779405	J-35616-35 (VT)	J-38125-557

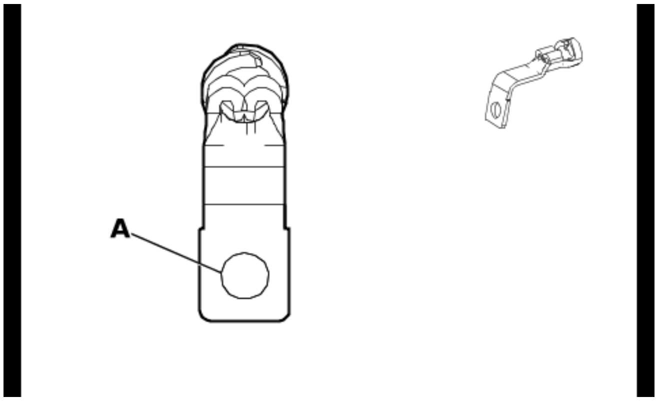
X50A Fuse Block - Underhood X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	—	—	—	Not Occupied	—	—
A2	0.75	VT / GY	709	Left Park Lamp Control	III	—
A3	1.5	GY / BN	2109	Trailer Park Lamp Control	III	—
A4	0.75	GY / BN	309	Right Park Lamp Control	III	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	0.5	GN / WH	24	Backup Lamp Control	III	—
B2	0.75	WH / GN	1624	Trailer Backup Lamp Control	III	—
B3	2	RD / GN	2440	Battery Positive Voltage	IV	—
B4	0.5	RD / GN	1840	Battery Positive Voltage	III	—
B5 - C6	—	—	—	Not Occupied	—	—
C7	0.5	RD / WH	2040	Battery Positive Voltage	I	—
C8 - D1	—	—	—	Not Occupied	—	—
D2	4	RD / GN	742	Battery Positive Voltage	II	—
E1 - G2	—	—	—	Not Occupied	—	—
G3	0.75	YE / BU	318	Left Rear Trailer Stop/Turn Lamp Control	III	—
G4	2	RD / YE	5840	Battery Positive Voltage	IV	—
G5	1	RD / WH	3440	Battery Positive Voltage	III	—
G6	2.5	RD / YE	1142	Battery Positive Voltage	III	—
H1 - H2	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
H3	0.75	GN / VT	1619	Right Rear Trailer Stop/Turn Lamp Control	III	—
H4	2	RD / VT	5640	Battery Positive Voltage	IV	—
H5	2.5	RD / VT	1940	Battery Positive Voltage	III	—
H6	2.5	RD / VT	1242	Battery Positive Voltage	III	—

X50A Fuse Block - Underhood X5



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Connector Part Information

Harness Type: Generator
OEM Connector: 84386513
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

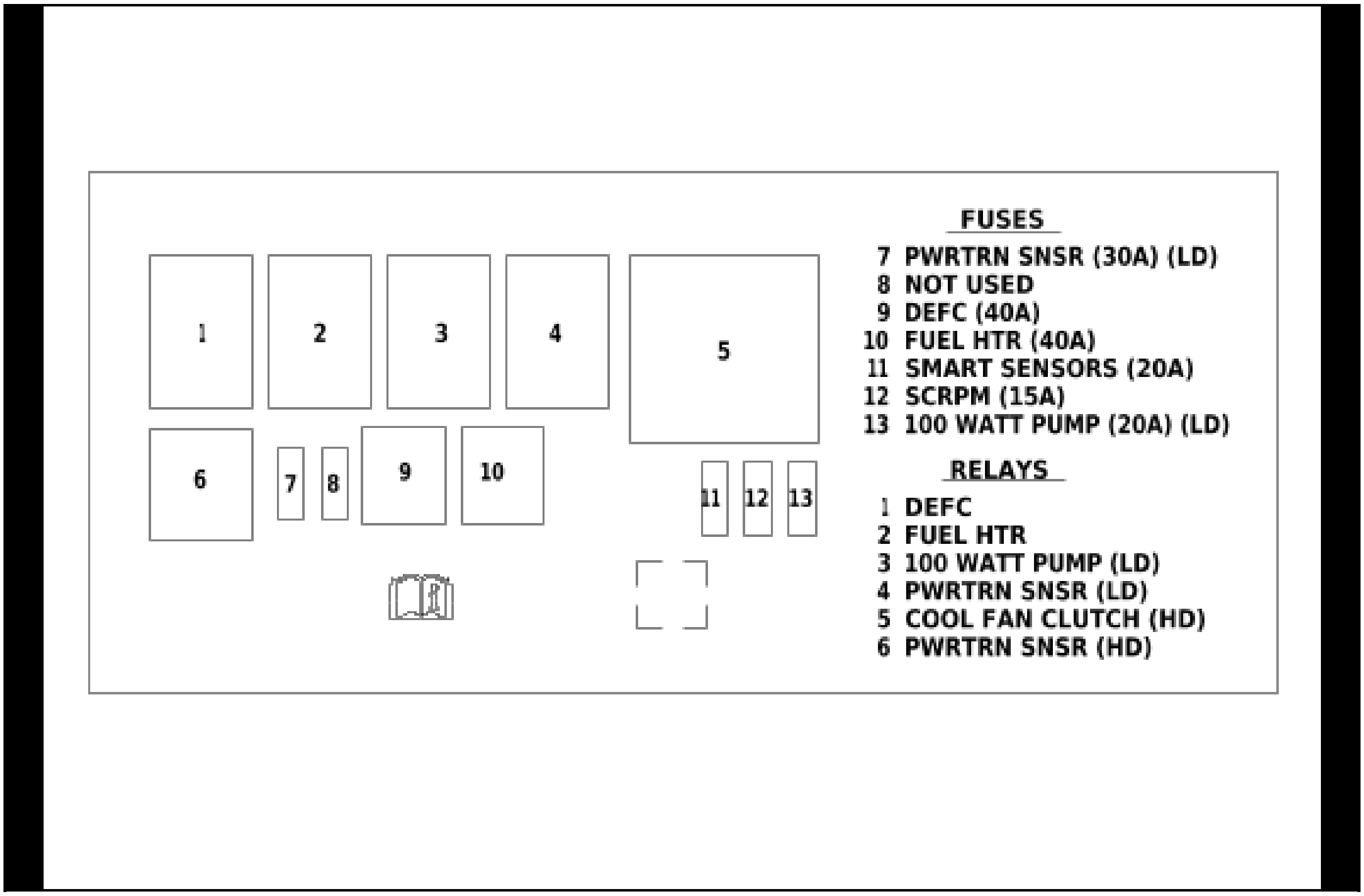
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50A Fuse Block - Underhood X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	RD / GN	242	Battery Positive Voltage	I	—

X50B Fuse Block - Underhood Auxiliary Label (LM2)



FUSES

7 PWRTRN SNSR (30A) (LD)
8 NOT USED
9 DEFC (40A)
10 FUEL HTR (40A)
11 SMART SENSORS (20A)
12 SCRPM (15A)
13 100 WATT PUMP (20A) (LD)

RELAYS

1 DEFC
2 FUEL HTR
3 100 WATT PUMP (LD)
4 PWRTRN SNSR (LD)
5 COOL FAN CLUTCH (HD)
6 PWRTRN SNSR (HD)

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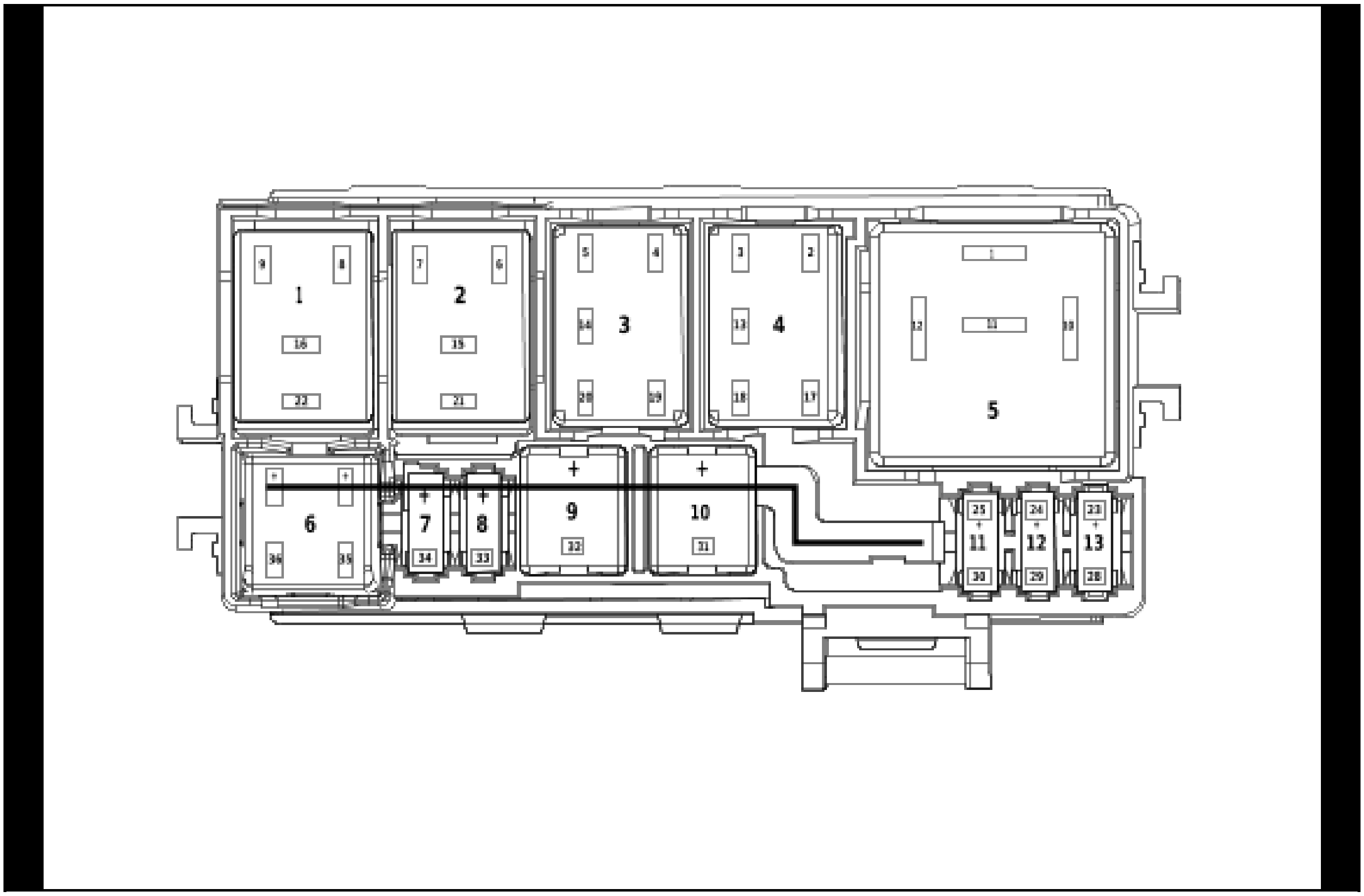
X50B Fuse Block - Underhood Auxiliary Top View (LM2)



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Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
7	PWRTRN SNSR	F7UB	30A	• KR121B Reductant Control Module Relay 2
8	NOT USED	F8UB	—	• Not Used
9	DEFC	F9UB	40A	• KR121A Reductant Control Module Relay 1 • F13UB
10	FUEL HTR	F10UB	40A	• KR22 Fuel Heater Relay
11	SMART SENSORS	F11UB	20A	• B136 Exhaust Particulate Sensor • B195B Nitrogen Oxides Sensor 2 • B195C Nitrogen Oxides Sensor 3
12	SCRPM	F12UB	15A	• B195A Nitrogen Oxides Sensor 1 • K111 Fuel Pump Driver Control Module • K115 Reductant Control Module
13	100 WATT PUMP	F13UB	20A	• KR18 Charge Air Cooler Coolant Pump Relay
Relays				
1	DEFC	KR121A Reductant Control Module Relay 1	—	• K115 Reductant Control Module
2	FUEL HTR	KR22 Fuel Heater Relay	—	• E11A Fuel Heater/Water in Fuel Sensor
3	100 WATT PUMP (LD)	KR18 Charge Air Cooler Coolant Pump Relay	—	• M10 Charge Air Cooler Coolant Pump

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
4	PWRTRN SNSR (LD)	KR121B Reductant Control Module Relay 2	—	• F11UB • F12UB
5	COOL FAN CLUTCH (HD)	—	—	• Not Used
6	PWRTRN SNSR (HD)	—	—	• Not Used

X50B Fuse Block - Underhood Auxiliary Wire Entry (LM2)

—

Connector Part Information

Harness Type: Engine
OEM Connector: 35209870
Service Connector: Service by Component Assembly - See Part Catalog
Description: Wire Entry Fuse Block

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13327158	J-35616-42 (RD)	J-38125-215A
II	13327178	J-35616-43 (RD)	J-38125-215A
III	13582244	J-35616-42 (RD)	J-38125-215A
IV	19368322	J-35616-43 (RD)	J-38125-215A
V	Not required	J-35616-22 (RD)	No Tool Required
VI	Not required	J-35616-4A (PU)	No Tool Required

X50B Fuse Block - Underhood Auxiliary Wire Entry (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	0.5	GN / BU	3889	Powertrain Sensor Bus Relay Control	VI	—
3	1.5	RD / BU	4540	Battery Positive Voltage	VI	—
4	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	VI	—
5	1	RD / GN	40	Battery Positive Voltage	VI	—
6	0.5	GY / BN	7071	Fuel Heater Control	I	—
7	2.5	VT / GN	355	Fuel Filter Heater Control Circuit	III	—
8	0.5	GN / BU	3889	Powertrain Sensor Bus Relay Control	I	—
9	0.5	BK	4450	Ground	I	—
15	2.5	VT / GN	355	Fuel Filter Heater Control Circuit	III	—
16	2.5	BU	3921	Diesel Exhaust Fluid Heater Control 1	III	—
17	1.5	GN / BU	9999	—	VI	—
18	0.5	BK	4450	Ground	VI	—
19	1	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	VI	—
20	0.5	BK	4450	Ground	VI	—
21	2.5	VT / GN	355	Fuel Filter Heater Control Circuit	III	—
22	2.5	BU	3921	Diesel Exhaust Fluid Heater Control 1	III	—
23	2.5	RD / GN	40	Battery Positive Voltage	VI	—
24	1.5 1.5	GN / BU GN / GY	9999 9999	— —	VI	— —
25	1.5	GN / GY	9999	—	VI	—
26	10	RD / VT	4040	Battery Positive Voltage	V	—
28	1	RD / GN	40	Battery Positive Voltage	VI	—
29	1.5	VT / GN	4320	Powertrain Sensor Bus Enable	VI	—
30	2.5	VT / BU	3674	NOx Sensor 1 Control	IV	—
31	2.5	VT / GN	355	Fuel Filter Heater Control Circuit	II	—
32	2.5 2.5	BU RD / GN	3921 40	Diesel Exhaust Fluid Heater Control 1 Battery Positive Voltage	IV	— —

X50B Fuse Block - Underhood Auxiliary Wire Entry (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
34	1.5	RD / BU	4540	Battery Positive Voltage	VI	—

X54 Fuse Block - Snow Plow (VYU)

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Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 35028846
Service Connector: Service by Component Assembly - See Part Catalog
Description: Wire Entry Fuse Block

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

X54 Fuse Block - Snow Plow (VYU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A4	0.5	BN	25	Charge Indicator Control	I	—
A6	0.75	RD	9026	—	I	—
B4	0.75	WH / BU	9030	—	I	—
B5	0.5	BN	9025	—	I	—

X55SP Fuse Holder - Snow Plow (VYU)

—

Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 33391084
Service Connector: Service by Component Assembly - See Part Catalog
Description: Wire Entry Fuse Holder

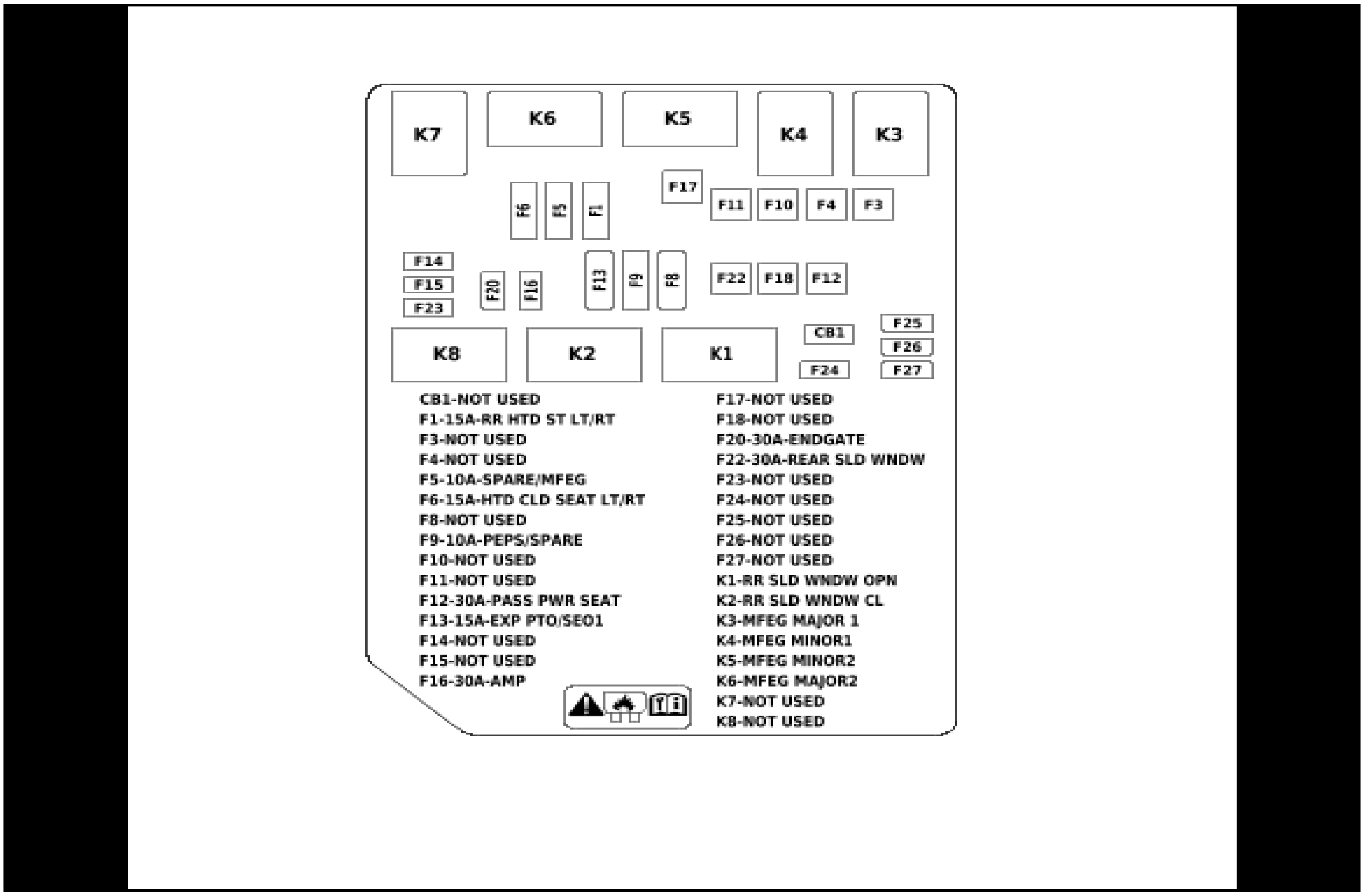
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

X55SP Fuse Holder - Snow Plow (VYU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	OG	9026	—	I	—
B	1	OG	9028	—	I	—

X51L Fuse Block - Instrument Panel Left Label


K7
K6
K5
K4
K3
F17
F6
F5
F1
F11
F10
F4
F3
F14
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F23
F20
F16
F13
F9
F8
F22
F18
F12
CB1
F25
F26
F27
F24
K8
K2
K1
CB1-NOT USED
F1-15A-RR HTD ST LT/RT
F3-NOT USED
F4-NOT USED
F5-10A-SPARE/MFEG
F6-15A-HTD CLD SEAT LT/RT
F8-NOT USED
F9-10A-PEPS/SPARE
F10-NOT USED
F11-NOT USED
F12-30A-PASS PWR SEAT
F13-15A-EXP PTO/SEO1
F14-NOT USED
F15-NOT USED
F16-30A-AMP
F17-NOT USED
F18-NOT USED
F20-30A-ENDGATE
F22-30A-REAR SLD WNDW
F23-NOT USED
F24-NOT USED
F25-NOT USED
F26-NOT USED
F27-NOT USED
K1-RR SLD WNDW OPN
K2-RR SLD WNDW CL
K3-MFEG MAJOR 1
K4-MFEG MINOR1
K5-MFEG MINOR2
K6-MFEG MAJOR2
K7-NOT USED
K8-NOT USED

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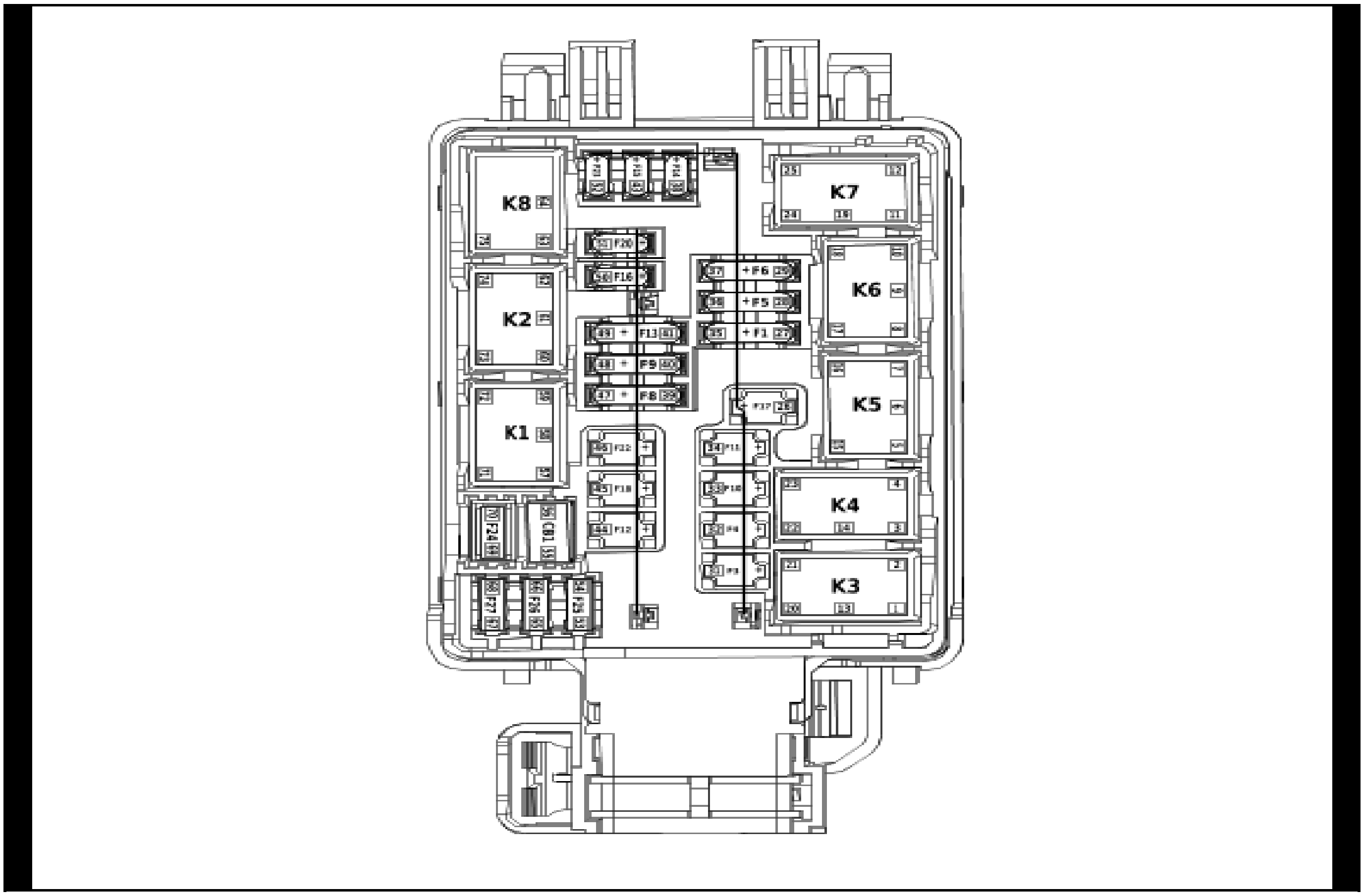
X51L Fuse Block - Instrument Panel Left Top View



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Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	RR HTD ST LT/RT	F1DL	15A	• K29R Seat Heating Control Module - Rear (KA6)
F3	NOT USED	F3DL	—	• Not Used
F4	NOT USED	F4DL	—	• Not Used
F5	SPARE/MFEG	F5DL	10A	• KR191L Pickup Box Endgate Latch Relay - Left (QT5) • KR192L Pickup Box Auxiliary Endgate Latch Relay - Left (QK2+QT5)
F6	HTD CLD SEAT LT/RT	F6DL	15A	• K29F Seat Heating Control Module - Front (KA1)
F8	NOT USED	F8DL	—	• Not Used
F9	PEPS/SPARE	F9DL	10A	• K84 Keyless Entry Control Module (BTM)
F10	NOT USED	F10DL	—	• Not Used
F11	NOT USED	F11DL	—	• Not Used
F12	PASS PWR SEAT	F12DL	30A	• S64P Seat Adjuster Switch - Passenger (A7K)
F13	EXP PTO/SEO1	F13DL	—	• Not Used
F14	NOT USED	F14DL	—	• Not Used
F15	NOT USED	F15DL	—	• Not Used
F16	AMP	F16DL	30A	• T3 Audio Amplifier (UQA)
F17	NOT USED	F17DL	—	• Not Used

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F18	NOT USED	F18DL	—	• Not Used
F20	ENDGATE	F20DL	30A	• K194 Pickup Box Endgate Control Module (QT6)
F22	REAR SLD WNDW	F22DL	30A	• KR8A Sliding Rear Window Close Relay (A48) • KR8B Sliding Rear Window Open Relay (A48)
F23	NOT USED	F23DL	—	• Not Used
F24	NOT USED	F24DL	—	• Not Used
F25	NOT USED	F25DL	—	• Not Used
F26	NOT USED	F26DL	—	• Not Used
F27	NOT USED	F27DL	—	• Not Used
Circuit Breakers				
CB1	NOT USED	CB1DL	—	• Not Used
Relays				
K1	RR SLD WNDW OPN	KR8B	—	• M63 Sliding Rear Window Motor (A48)
K2	RR WNDW CL	KR8A	—	• M63 Sliding Rear Window Motor (A48)
K3	MFEG MAJOR1	KR191L Pickup Box Endgate Latch Relay - Left	—	• A99L Pickup Box Endgate Latch - Left (QK2) • A99R Pickup Box Endgate Latch - Right (QK2) • A99C Pickup Box Endgate Latch - Center (QK1)
K4	MFEG MINOR1	KR192L Pickup Box Auxiliary Endgate Latch Relay - Left	—	• A100L Pickup Box Auxiliary Endgate Latch - Left (QK2) • A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)
K5	MFEG MINOR2	KR192R Pickup Box Auxiliary Endgate Latch Relay - Right	—	• A100L Pickup Box Auxiliary Endgate Latch - Left (QK2) • A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)
K6	MFEG MAJOR2	KR191R Pickup Box Endgate Latch Relay - Right	—	• A99L Pickup Box Endgate Latch - Left (QK2) • A99R Pickup Box Endgate Latch - Right (QK2) • A99C Pickup Box Endgate Latch - Center (QK1)
K7	NOT USED	—	—	• Not Used
K8	NOT USED	—	—	• Not Used

X51L Fuse Block - Instrument Panel Left Wire Entry

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Component Assembly - See Part Catalog
Description:

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575574	J-35616-5 (PU)	J-38125-215A
II	19332366	J-35616-35 (VT)	J-38125-212
III	Not required	J-35616-22 (RD)	No Tool Required
IV	Not required	J-35616-4A (PU)	No Tool Required

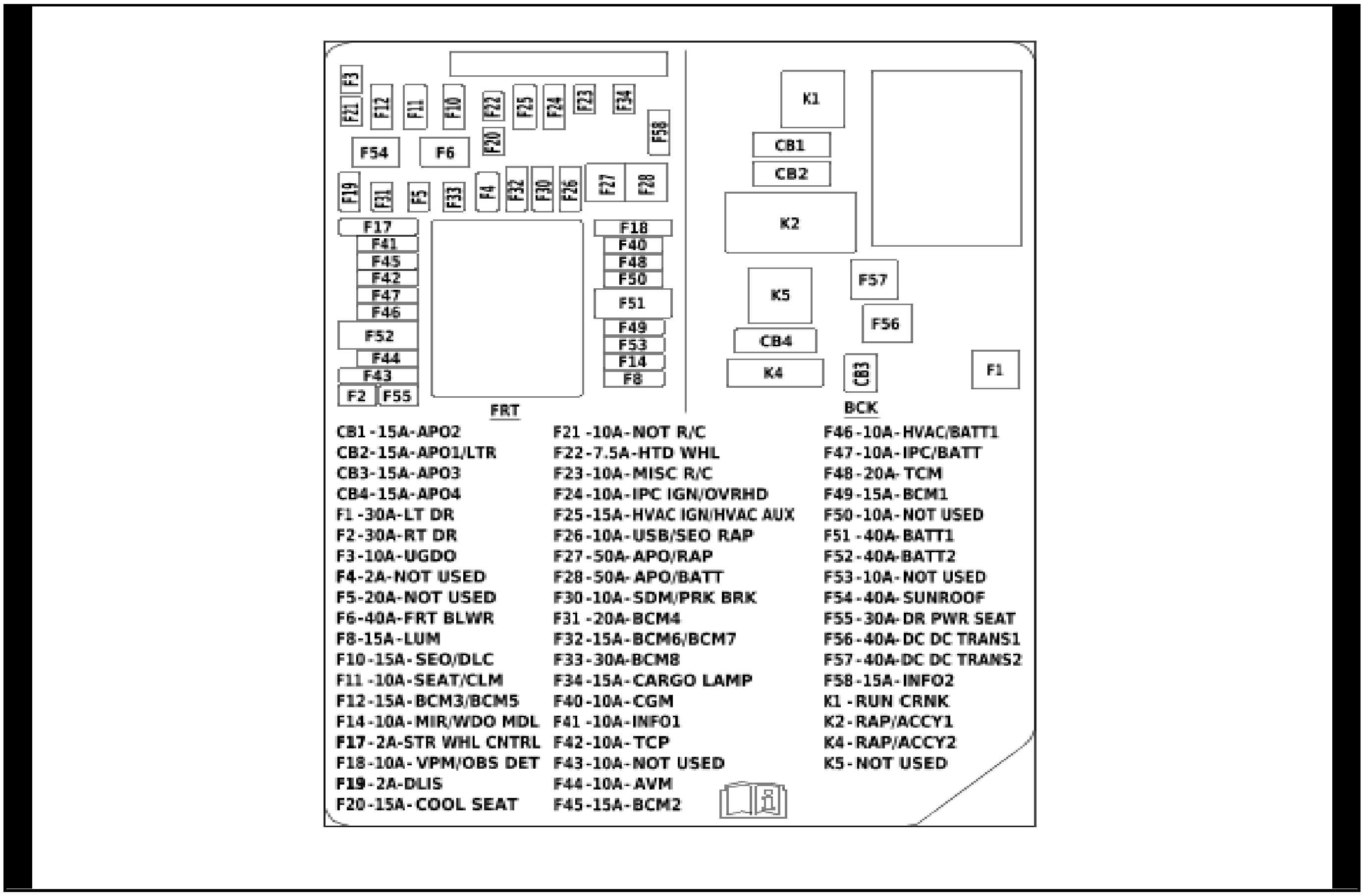
X51L Fuse Block - Instrument Panel Left Wire Entry

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / GN	7728	Major Endgate High Relay Control	IV	—
2	0.75	GN	1299	Major Endgate Motor Control	IV	—
3	0.75	WH / GY	7297	Minor Endgate High Relay Control	IV	—
4	0.75	VT	7725	Minor Endgate Motor Control	IV	—
5	0.75	BK	1150	Ground	IV	—
6	0.75	BN / YE	7727	Minor Endgate Motor Ground	IV	—
7	0.75	GY / BU	7298	Minor Endgate Low Relay Control	IV	—
8	0.75	BK	1150	Ground	IV	—
9	0.5	BN / VT	7731	Major Endgate Motor Ground	IV	—
10	0.75	BU / VT	7729	Major Endgate Low Relay Control	IV	—
13	0.5	BN / VT	7731	Major Endgate Motor Ground	IV	—
14	0.75	BN / YE	7727	Minor Endgate Motor Ground	IV	—
15	0.75	BK	1150	Ground	IV	—
16	0.75	BN / BK	7726	Minor Endgate Motor Low Reference	IV	—
17	0.75	BK	1150	Ground	IV	—
18	0.75	YE / BK	7730	Major Endgate Motor Low Reference	IV	—
20	0.75	RD / BU	7640	Battery Positive Voltage	IV	—
21	0.75	BK	1150	Ground	IV	—
22	0.75	RD / BU	7640	Battery Positive Voltage	IV	—
23	0.75	BK	1150	Ground	IV	—
26	0.5	RD / BU	7640	Battery Positive Voltage	I	—
27	0.5	RD / YE	240	Battery Positive Voltage	II	—
29	0.5	RD / GN	5140	Battery Positive Voltage	IV	—
30	10	RD / GY	2042	Battery Positive Voltage	III	—
35	0.5	RD / VT	340	Battery Positive Voltage	II	—
36	0.75 0.75	RD / BU RD / BU	7640 7640	Battery Positive Voltage Battery Positive Voltage	IV	QK2+ QT5 QT5
37	0.5	RD	6140	Battery Positive Voltage	IV	—
40	0.5	RD / YE	4340	Battery Positive Voltage	IV	—

X51L Fuse Block - Instrument Panel Left Wire Entry (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
42	10	RD / VT	2142	Battery Positive Voltage	III	—
44	2.5	RD / BN	1440	Battery Positive Voltage	I	—
46	2.5	RD / VT	3340	Battery Positive Voltage	I	—
50	2.5	RD / YE	3740	Battery Positive Voltage	IV	—
51	2.5	RD / GY	7040	Battery Positive Voltage	IV	—
57	2.5	RD / VT	3340	Battery Positive Voltage	IV	—
58	2.5	BK	1150	Ground	IV	—
59	0.5	BK	1150	Ground	II	—
60	2.5	RD / VT	3340	Battery Positive Voltage	IV	—
61	2.5	BK	1150	Ground	IV	—
62	0.5	BK	1150	Ground	II	—
71	0.35	YE / VT	6191	Power Rear Window Switch Open Signal	III	—
72	2.5	GY / GN	5441	Endgate Window Motor Down Signal	IV	—
73	0.35	WH	6192	Sliding Rear Window Switch Close Signal	III	—
74	2.5	YE / BU	5442	Endgate Window Motor Up Signal	IV	—

X51R Fuse Block - Instrument Panel Right Label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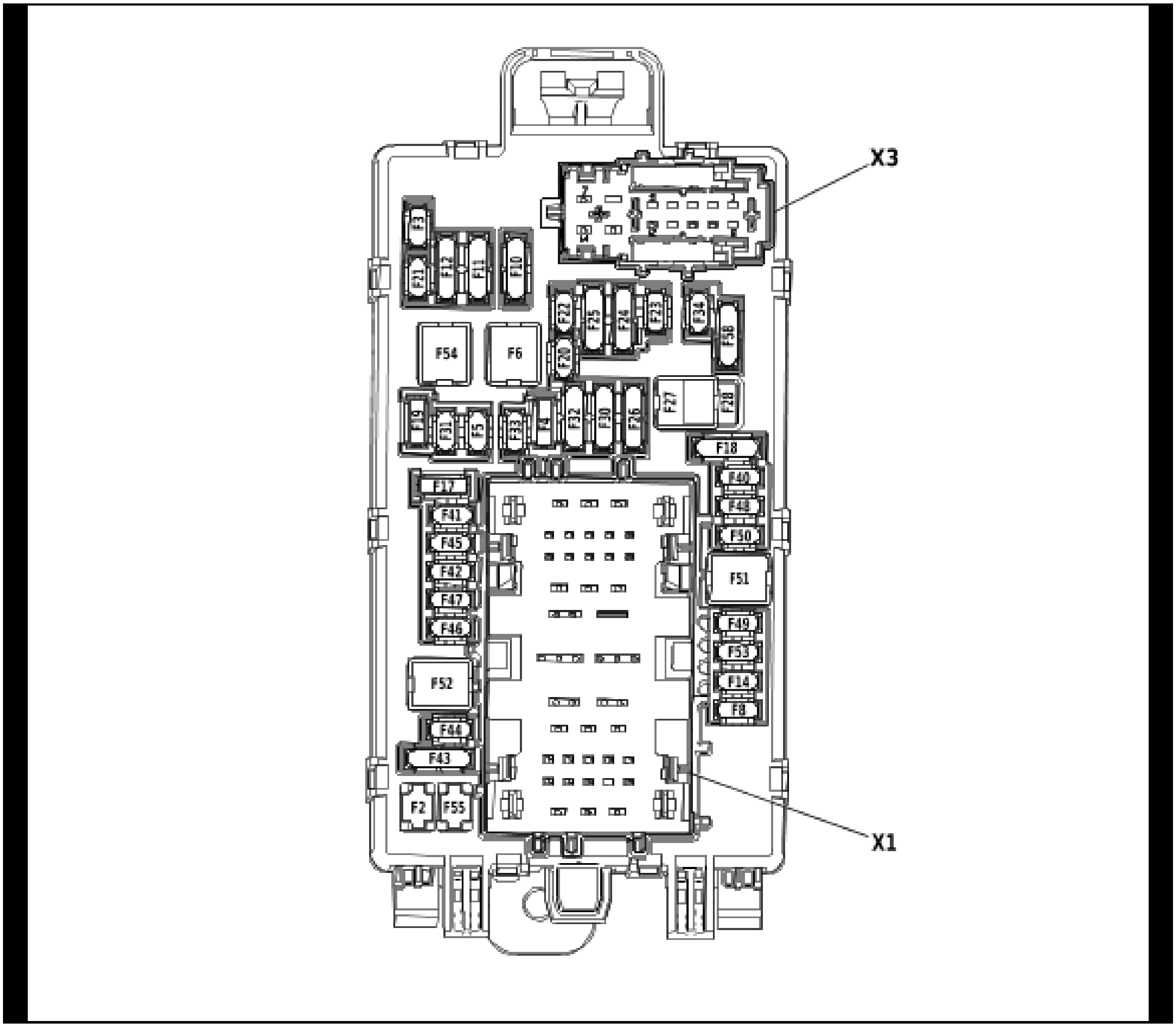
FRT
K1
CB1
CB2
K2
K5
F57
F56
CB4
K4
CB3
F1
BCK

CB1-15A-APO2
CB2-15A-APO1/LTR
CB3-15A-APO3
CB4-15A-APO4
F1-30A-LT DR
F2-30A-RT DR
F3-10A-UGDO
F4-2A-NOT USED
F5-20A-NOT USED
F6-40A-FRT BLWR
F8-15A-LUM
F10-15A-SEO/DLC
F11-10A-SEAT/CLM
F12-15A-BCM3/BCM5
F14-10A-MIR/WDO MDL
F17-2A-STR WHL CNTRL
F18-10A-VPM/OBS DET
F19-2A-DLIS
F20-15A-COOL SEAT
F21-10A-NOT R/C
F22-7.5A-HTD WHL
F23-10A-MISC R/C
F24-10A-IPC IGN/OVRHD
F25-15A-HVAC IGN/HVAC AUX
F26-10A-USB/SEO RAP
F27-50A-APO/RAP
F28-50A-APO/BATT
F30-10A-SDM/PRK BRK
F31-20A-BCM4
F32-15A-BCM6/BCM7
F33-30A-BCM8
F34-15A-CARGO LAMP
F40-10A-CGM
F41-10A-INFO1
F42-10A-TCP
F43-10A-NOT USED
F44-10A-AVM
F45-15A-BCM2
F46-10A-HVAC/BATT1
F47-10A-IPC/BATT
F48-20A-TCM
F49-15A-BCM1
F50-10A-NOT USED
F51-40A-BATT1
F52-40A-BATT2
F53-10A-NOT USED
F54-40A-SUNROOF
F55-30A-DR PWR SEAT
F56-40A-DC DC TRANS1
F57-40A-DC DC TRANS2
F58-15A-INFO2
K1-RUN CRNK
K2-RAP/ACCY1
K4-RAP/ACCY2
K5-NOT USED

5041372

X51R Fuse Block - Instrument Panel Right Top View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Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	LT DR	F1DR	30A	• M74D Window Motor - Driver (AXG) • S79LR Window Switch - Left Rear (AEQ)
F2	RT DR	F2DR	30A	• M74P Window Motor - Passenger (AEF) • S79P Window Switch - Passenger (AED/AEF) • S79RR Window Switch - Right Rear (AEQ)
F3	UGDO	F3DR	10A	• A98 Front Overhead Console Assembly • E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)
F4	NOT USED	F4DR	2A	• Not Used
F5	NOT USED	F5DR	20A	• Not Used
F6	FRT BLWR	F6DR	40A	• K8 Blower Motor Control Module

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F8	LUM	F8DR	15A	• S65D Seat Lumbar Support Switch - Driver (A2X) • S65P Seat Lumbar Support Switch - Passenger (A7K)
F10	SEO/DLC	F10DR	15A	• K9 Body Control Module
F11	SEAT/CLM	F11DR	10A	• F19DR (-BTM) • K40 Seat Memory Control Module (A45) • K60 Steering Column Lock Module (BTM)
F12	BCM3/BCM5	F12DR	15A	• K9 Body Control Module
F14	MIR/WDO MDL	F14DR	10A	• S146 Window/Outside Rearview Mirror Switch - Driver (AXG)
F17	STR WHL CNTRL	F17DR	2A	• S70L Steering Wheel Controls Switch - Left (K34) • S70R Steering Wheel Controls Switch - Right (K34)
F18	VPM/OBS DET	F18DR	10A	• B174W Frontview Camera - Windshield (UEU/UHX) • K157 Video Processing Control Module (UVI/UVS) • K182 Parking Assist Control Module (UD5/UD7)
F19	DLIS	F19DR	2A	• S39 Ignition Switch (-BTM)
F20	COOL SEAT	F20DR	15A	• M73A Seat Blower Motor - Driver Back (KQV) • M73B Seat Blower Motor - Passenger Back (KQV) • M73C Seat Blower Motor - Driver Cushion (KQV) • M73D Seat Blower Motor - Passenger Cushion (KQV)
F21	NOT R/C	F21DR	10A	• K60 Steering Colmn Lock Module (BTM)
F22	HTD WHL	F22DR	7.5A	• K32 Steering Wheel Heating Control Module (KI3)
F23	MISC R/C	F23DR	10A	• B87 Rearview Camera (UVC) • T19 Power Supply Transformer (KL9)
F24	IPC IGN/OVRHD	F24DR	10A	• A10 Inside Rearview Mirror (DD8/DRZ) • A98 Front Overhead Console Assembly • K56 Serial Data Gateway Module • P16 Instrument Cluster • P43 Collision Alert Indicators ((UHX/UEU)-UV6)
F25	HVAC IGN/HVAC AUX	F25DR	15A	• E40 Electrical Auxiliary Heater (C32)
F26	USB/SEO RAP	F26DR	10A	• A98 Front Overhead Console Assembly • T22 Mobile Device Wireless Charger Module (K4C) • X92B USB Receptacle - Rear Seat (AZ3) • X92C USB Receptacle - Center Console Rear (D07) • X260
F27	APO/RAP	F27DR	50A	• CB1DR • CB2DR
F28	APO/BATT	F28DR	50A	• CB1DR • CB2DR
F30	SDM/PRK BRK	F30DR	10A	• B80 Park Brake Switch • K85 Passenger Presence Module • K36 Inflatable Restraint Sensing and Diagnostic Module • S76 Trailer Brake Control Switch (JL1)
F31	BCM4	F31DR	20A	• K9 Body Control Module
F32	BCM6/BCM7	F32DR	10A	• X84 Data Link Connector
F33	BCM8	F33DR	30A	• K9 Body Control Module

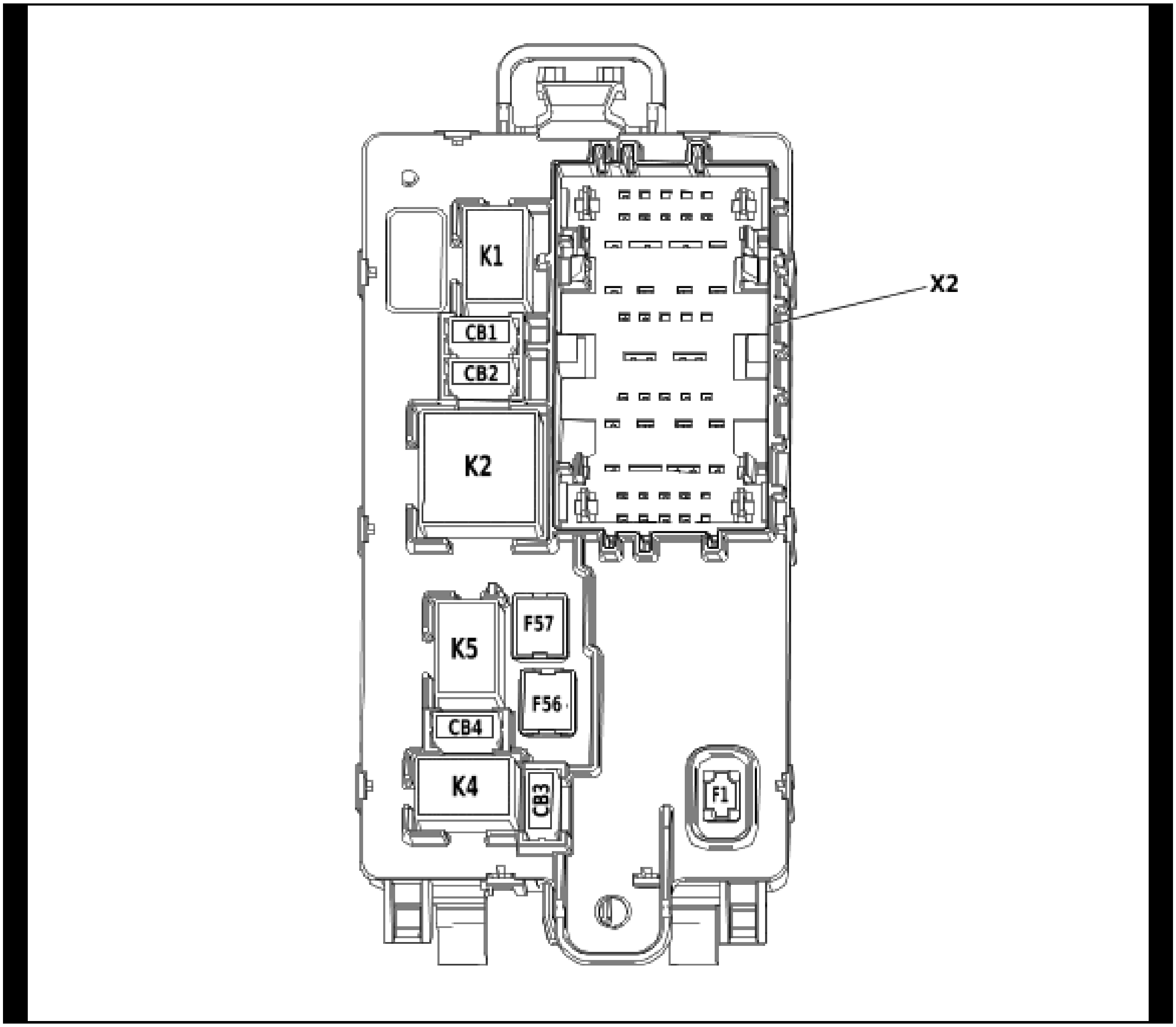
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F34	CARGO LAMP	F34DR	15A	• E8L Liftgate Courtesy Lamp (QT5/QT6) • E6 Center High Mounted Stop Lamp • S30 Headlamp Switch (QT5/QT6)
F40	CGM	F40DR	10A	• K56 Serial Data Gateway Module
F41	INFO1	F41DR	10A	• A26 HVAC Controls • P17 Info Display Module (IOS/IOT/(IOR+UIJ)) • P29 Head-Up Display (UV6) • S32R Seat Heating Switch - Rear (KA6) • X83 Auxiliary Audio Input • X92 USB Receptacle
F42	TCP	F42DR	10A	• K73 Telematics Communication Interface Control Module (UE1)
F43	NOT USED	F43DR	10A	• Not Used
F44	AVM	F44DR	10A	• Q80L Engine Mount Solenoid Valve - Left (L3B/LM2) • Q80R Engine Mount Solenoid Valve - Right (L3B/LM2)
F45	BCM2	F45DR	15A	• K9 Body Control Module
F46	HVAC/BATT1	F46DR	10A	• K33 HVAC Control Module
F47	IPC/BATT	F47DR	10A	• P16 Instrument Cluster
F48	TCM	F48DR	20A	• K71 Transmission Control Module (MQB/MQE) • Q8 Control Solenoid Valve Assembly (MYC)
F49	BCM1	F49DR	15A	• K9 Body Control Module
F50	NOT USED	F50DR	10A	• Not Used
F51	BATT1	F51DR	40A	• F18DR (-KL9) • F40DR (-KL9) • F48DR (-KL9) • F49DR (-KL9) • F58DR (-KL9)
F52	BATT2	F52DR	40A	• F17DR (-KL9) • F41DR (-KL9) • F42DR (-KL9) • F44DR (-KL9) • F45DR (-KL9) • F46DR (-KL9) • F47DR (-KL9)
F53	NOT USED	F53DR	10A	• Not Used
F54	SUNROOF	F54DR	40A	• M69 Sunroof Motor (CF5)
F55	DR PWR SEAT	F55DR	30A	• S64D Seat Adjuster Switch - Driver (A2X-A45) • K40 Seat Memory Control Module (A45)
F56	DC DC TRANS1	F56DR	40A	• T19 Power Supply Transformer
F57	DC DC TRANS2	F57DR	40A	• T19 Power Supply Transformer
F58	INFO2	F58DR	15A	• A11 Radio
Circuit Breakers				
CB1	APO2	CB1DR	15A	• X80G Accessory Power Receptacle - Instrument Panel
CB2	APO1/LTR	CB2DR	15A	• X80L Accessory Power Receptacle - Center Console Rear (D07) • X80M Accessory Power Receptacle - Rear Seat (AZ3)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
Relays				
K1	RUN CRNK	KR73 Ignition Main Relay	—	• F20DR • F21DR • F22DR • F23DR • F24DR • F25DR
K2	RAP/ACCY1	KR76A Accessory Time delay Cutoff Relay 1	—	• F26DR • F27DR
K4	RAP/ACCY2	KR76B Accessory Time Delay Cutoff Relay 2	—	• CB3DR • CB4DR
K5	NOT USED	—	—	• Not Used

X51R Fuse Block - Instrument Panel Right Bottom View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CB4
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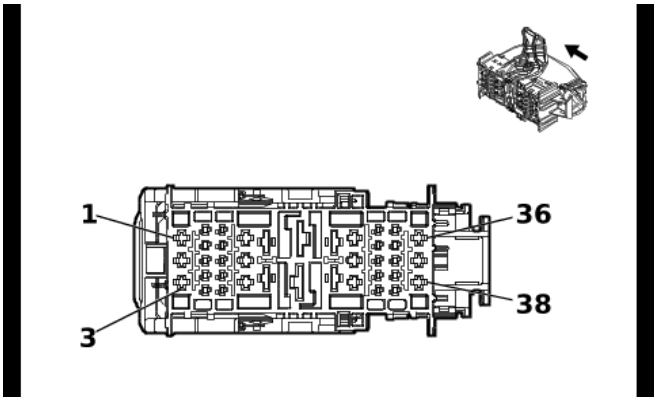
X51R Fuse Block - Instrument Panel Right X1 (EXTENDED CAB/CREW CAB)



5402140

Connector Part Information

Harness Type: Body
OEM Connector: 35264615
Service Connector: 84941450
Description: 38 <p01>-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series(BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332366	J-35616-35 (VT)	J-38125-212
I	19332366	J-35616-35 (VT)	J-38125-212
II	19371175	J-35616-14 (GN)	J-38125-560A
III	19371175	J-35616-2A (GY)	J-38125-11A
IV	84764078	J-35616-42 (RD)	J-38125-11A
V	Not required	J-35616-22 (RD)	No Tool Required

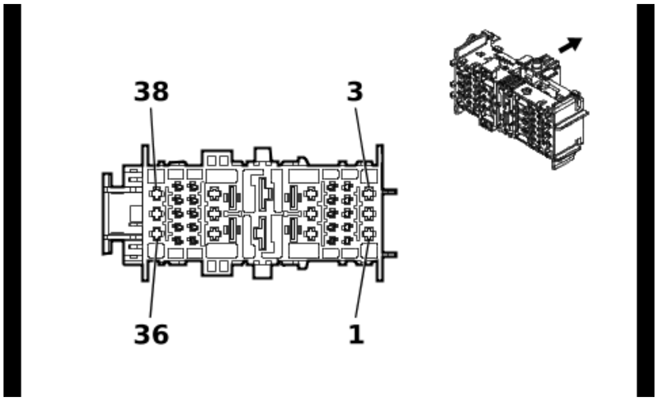
X51R Fuse Block - Instrument Panel Right X1 (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	1	RD / GN	1840	Battery Positive Voltage	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	RD / GN	4440	Battery Positive Voltage	III	—
6	0.35	VT / YE	143	Accessory Ignition Voltage	II	—
7	—	—	—	Not Occupied	—	—
8	0.35 0.35	VT / YE VT	43 4601	Accessory Ignition Voltage Retained Accessory Power Control	II	— K4C
9	0.35	RD / GN	3140	Battery Positive Voltage	II	—
10	0.35 0.35	GY / GN GY / VT	4083 755	Retained Accessory Power Relay 2 Coil Control Retained Accessory Power Relay Coil Control	II II	BTM - BTM
11	0.35	RD / VT	1640	Battery Positive Voltage	II	—
12	0.5	VT / GN	1739	Run/Crank Ignition 1 Voltage	III	—
13	0.5	VT / GN	1739	Run/Crank Ignition 1 Voltage	III	—
14	0.35	RD / BN	1140	Battery Positive Voltage	I	—
15	0.35	GN / VT	5199	Run/Crank Relay Coil Control	I	—

X51R Fuse Block - Instrument Panel Right X1 (EXTENDED CAB/CREW CAB) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
16	1.5	RD / WH	1040	Battery Positive Voltage	I	—
17	2.5	RD / YE	2172	12V Regulated Supply Voltage 1	IV	—
18	2.5	RD / YE	8140	Battery Positive Voltage	IV	—
19	10	RD / GY	142	Battery Positive Voltage	V	—
20	10	RD / WH	342	Battery Positive Voltage	V	—
21	2.5	RD / GN	2173	12V Regulated Supply Voltage 2	IV	—
22	2.5	RD / WH	8040	Battery Positive Voltage	IV	—
23	2.5	RD / BU	1842	Battery Positive Voltage	I	—
24	2.5	RD / BU	1842	Battery Positive Voltage	I	—
25	2.5	RD / WH	1340	Battery Positive Voltage	I	—
26	—	—	—	Not Occupied	—	—
27	0.35	RD / GN	40	Battery Positive Voltage	II	—
28	—	—	—	Not Occupied	—	—
29	0.35	RD / VT	1940	Battery Positive Voltage	II	—
30	0.75	RD / YE	8840	Battery Positive Voltage	III	—
31	—	—	—	Not Occupied	—	—
32	0.35	BN / WH	1429	Standing Lamp Relay Control	II	—
33 - 35	—	—	—	Not Occupied	—	—
36	2.5	RD / YE	5040	Battery Positive Voltage	I	—
37	2.5	RD / WH	1340	Battery Positive Voltage	I	—
38	—	—	—	Not Occupied	—	—

X51R Fuse Block - Instrument Panel Right X1 (REGULAR CAB)



4994712

Connector Part Information

Harness Type: Body
OEM Connector: 33371909
Service Connector: 19371181
Description: 38 <p01>-Way F 1.5, 2.8, 6.3 CTS Series(BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332366	J-35616-35 (VT)	J-38125-212
II	19371175	J-35616-14 (GN)	J-38125-560A
III	19371175	J-35616-2A (GY)	J-38125-11A
IV	84764078	J-35616-42 (RD)	J-38125-11A
V	Not required	J-35616-22 (RD)	No Tool Required

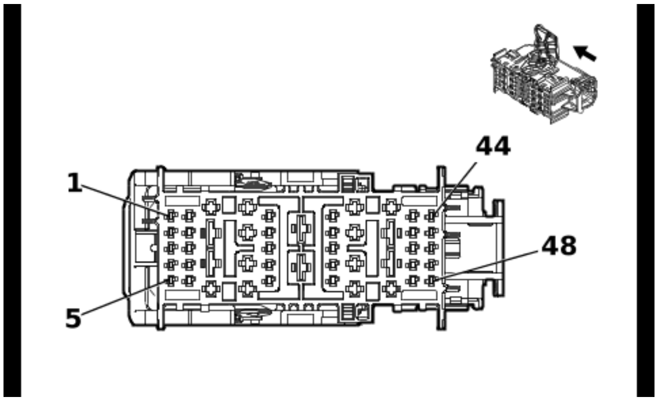
X51R Fuse Block - Instrument Panel Right X1 (REGULAR CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	RD / GN	4440	Battery Positive Voltage	III	—
6	0.35	VT / YE	143	Accessory Ignition Voltage	II	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.35	RD / GN	3140	Battery Positive Voltage	II	—
10	0.35 0.35	GY / GN GY / VT	4083 755	Retained Accessory Power Relay 2 Coil Control Retained Accessory Power Relay Coil Control	II II	BTM - BTM
11 - 15	—	—	—	Not Occupied	—	—
16	1.5	RD / WH	1040	Battery Positive Voltage	I	—
17	2.5	RD / YE	2172	12V Regulated Supply Voltage 1	IV	—
18	2.5	RD / YE	8140	Battery Positive Voltage	IV	—
19	10	RD / GY	142	Battery Positive Voltage	V	—
20	10	RD / WH	342	Battery Positive Voltage	V	—
21	2.5	RD / GN	2173	12V Regulated Supply Voltage 2	IV	—
22	2.5	RD / WH	8040	Battery Positive Voltage	IV	—
23	—	—	—	Not Occupied	—	—
24	2.5	RD / BU	1842	Battery Positive Voltage	I	—
25	2.5	RD / WH	1340	Battery Positive Voltage	I	—

X51R Fuse Block - Instrument Panel Right X1 (REGULAR CAB) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	—	—	—	Not Occupied	—	—
27	0.35	RD / GN	40	Battery Positive Voltage	II	—
28	—	—	—	Not Occupied	—	—
29	0.35	RD / VT	1940	Battery Positive Voltage	II	—
30 - 31	—	—	—	Not Occupied	—	—
32	0.35	BN / WH	1429	Standing Lamp Relay Control	II	—
33 - 35	—	—	—	Not Occupied	—	—
36	2.5	RD / YE	5040	Battery Positive Voltage	I	—
37 - 38	—	—	—	Not Occupied	—	—

X51R Fuse Block - Instrument Panel Right X2



5403539

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35264616
Service Connector: 19371180
Description: 48 <p01>-Way F 1.5, 2.8, 6.3 CTS Series(GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19301776	J-35616-14 (GN)	J-38125-560A
II	19301776	J-35616-2A (GY)	J-38125-11A
III	84764078	J-35616-40 (BU)	J-38125-556
IV	84764078	J-35616-42 (RD)	J-38125-11A
V	84779405	J-35616-35 (VT)	J-38125-212

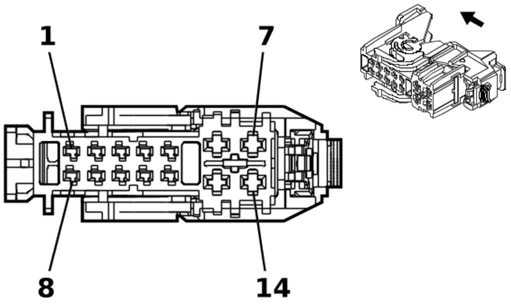
X51R Fuse Block - Instrument Panel Right X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1050	Ground	II	—
2 - 5	—	—	—	Not Occupied	—	—
6	0.75	RD / YE	2340	Battery Positive Voltage	II	—
7	0.75	RD / YE	2340	Battery Positive Voltage	II	—
8	0.5	RD / WH	3440	Battery Positive Voltage	II	—
9	0.5	RD / GY	4140	Battery Positive Voltage	II	—
10	0.35	BU / VT	807	Ignition Off/Accessory Ignition Voltage	I	—
11	0.5	VT / GY	539	Run/Crank Ignition 1 Voltage	V	—
12 - 13	—	—	—	Not Occupied	—	—
14	0.5	RD / BN	2940	Battery Positive Voltage	V	—
15	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	V	—
16	0.5	RD / GN	5140	Battery Positive Voltage	V	—
17	—	—	—	Not Occupied	—	—
18	0.5	RD / GY	2140	Battery Positive Voltage	V	—
19	0.35	VT / BK	1639	Run/Crank Ignition 1 Voltage	I	—
20 - 23	—	—	—	Not Occupied	—	—
24	4	RD / VT	542	Battery Positive Voltage	III	—
25	2.5	RD / GN	3140	Battery Positive Voltage	III	—

X51R Fuse Block - Instrument Panel Right X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	—	—	—	Not Occupied	—	—
27	0.5	RD / WH	640	Battery Positive Voltage	II	—
28	0.35	RD / GN	5140	Battery Positive Voltage	I	—
29	0.35	RD / BU	540	Battery Positive Voltage	I	—
30	0.35	RD / GY	4140	Battery Positive Voltage	I	—
31	1.5	RD / BN	4240	Battery Positive Voltage	V	—
32	2.5	RD / VT	4040	Battery Positive Voltage	V	—
33	—	—	—	Not Occupied	—	—
34	1	RD / BU	2540	Battery Positive Voltage	V	—
35 - 36	—	—	—	Not Occupied	—	—
37	0.75	RD / BN	2240	Battery Positive Voltage	IV	—
38	—	—	—	Not Occupied	—	—
39	0.35	RD / VT	3340	Battery Positive Voltage	I	—
40	0.35	RD / VT	3340	Battery Positive Voltage	I	—
41	0.35	RD / YE	3040	Battery Positive Voltage	I	—
42	0.5	RD / BU	3240	Battery Positive Voltage	II	—
43 - 44	—	—	—	Not Occupied	—	—
45	0.5	RD / WH	2740	Battery Positive Voltage	II	—
46	0.35	RD / GY	2840	Battery Positive Voltage	I	—
47	0.35	RD / WH	1340	Battery Positive Voltage	I	—
48	—	—	—	Not Occupied	—	—

X51R Fuse Block - Instrument Panel Right X3



5190115

Connector Part Information

Harness Type: Headliner
OEM Connector: 33377074
Service Connector: 13525315
Description: 14 <p01>-Way F 1.5, 2.8 MCP Series(GY)

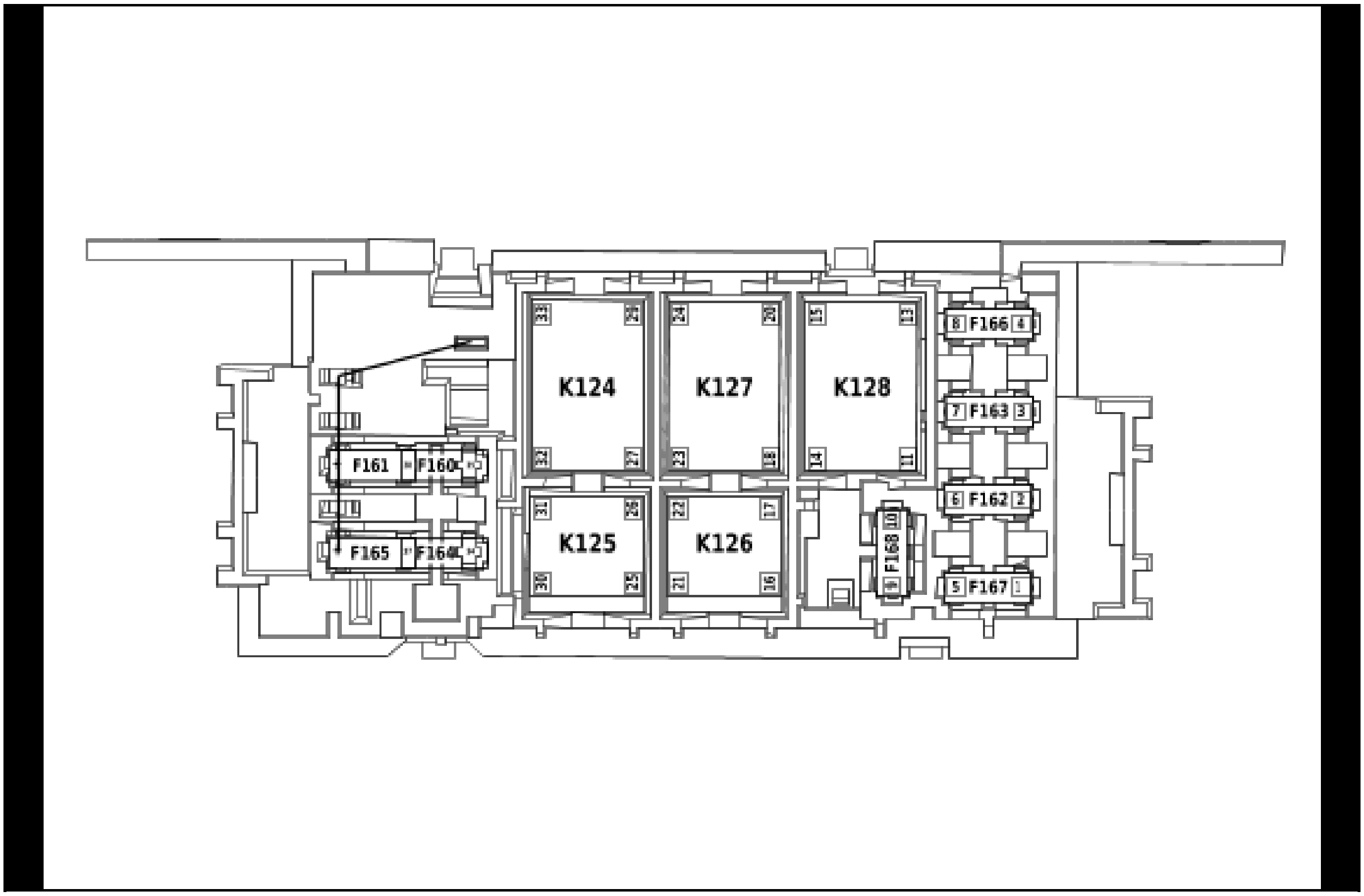
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332366	J-35616-4A (PU)	J-38125-557
II	19371175	J-35616-2A (GY)	J-38125-11A

X51R Fuse Block - Instrument Panel Right X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	0.35	RD / YE	240	Battery Positive Voltage	I	—
8	—	—	—	Not Occupied	—	—
9	0.35 0.5	WH / VT WH / VT	1430 1430	Exterior Courtesy Lamp Control Exterior Courtesy Lamp Control	II	— —
10	0.35	VT / YE	43	Accessory Ignition Voltage	II	—
11	—	—	—	Not Occupied	—	—
12	0.35	RD / GN	3140	Battery Positive Voltage	II	—
13	—	—	—	Not Occupied	—	—
14	0.35	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—

X51B Fuse Block - Instrument Panel Auxiliary Top View (9L7)


F161
F160
F165
F164
K124
K127
K128
K125
K126
F166
F163
F162
F167
F168
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5245414

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F160	—	F160DA	5A	• KR161A Configurable Provision Relay 1 • KR161B Configurable Provision Relay 2
F161	—	F161DA	5A	• KR161A Configurable Provision Relay 1 • KR161B Configurable Provision Relay 2
F162	—	F162DA	25A	• W25 Blunt Cut - Configurable Provision
F163	—	F163DA	20A	• W25 Blunt Cut - Configurable Provision
F164	—	F164DA	5A	• KR58 Roof Beacon Relay • KR161C Configurable Provision Relay 3 • KR161D Configurable Provision Relay 4
F165	—	F165DA	5A	• KR58 Roof Beacon Relay • KR161C Configurable Provision Relay 3 • KR161D Configurable Provision Relay 4
F166	—	F166DA	20A	• W25 Blunt Cut - Configurable Provision
F167	—	F167DA	25A	• W25 Blunt Cut - Configurable Provision
F168	—	F168DA	25A	• W25 Blunt Cut - Configurable Provision
Relays				
K128	—	KR58 Roof Beacon Relay	—	• F168DA

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
K124	—	KR161A Configurable Provision Relay 1	—	• F162DA
K125	—	KR161B Configurable Provision Relay 2	—	• F163DA
K126	—	KR161C Configurable Provision Relay 3	—	• F166DA
K127	—	KR161D Configurable Provision Relay 4	—	• F167DA

X51B Fuse Block - Instrument Panel Auxiliary Wire Entry (9L7)

—

Connector Part Information

Harness Type: Upfitter
OEM Connector: 33323307
Service Connector: Service by Component Assembly - See Part Catalog
Description: Wire Entry Fuse Block

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-22 (RD)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

X51B Fuse Block - Instrument Panel Auxiliary Wire Entry (9L7)

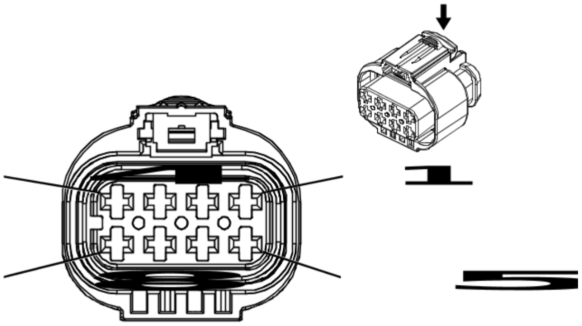
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE / BN	968	—	II	—
2	2.5	BU	965	—	II	—
3	2.5	GY / BK	966	—	II	—
4	2.5	BN / WH	967	—	II	—
5	2.5	OG / WH	968	—	II	—
6	2.5	BU	965	—	II	—
7	2.5	GY / BK	966	—	II	—
8	2.5	BN / WH	967	—	II	—
9	2.5	GN / BU	5989	Emergency Vehicle Lamp Relay Control	II	—
10	2.5	GN / BU	5989	Emergency Vehicle Lamp Relay Control	II	—
11	2.5	GN / BU	5989	Emergency Vehicle Lamp Relay Control	II	—
13	0.35	BU	903	—	I	—
14	0.5	WH / BK	5990	Emergency Vehicle Roof Lamp Switch Signal	II	—
15	2.5	RD / BU	42	Battery Positive Voltage	II	—
16	2.5	RD / BU	42	Battery Positive Voltage	II	—
17	0.35	BK	963	—	I	—
18	2.5	OG / WH	968	—	II	—
20	0.35	BU	903	—	II	—
21	0.35	BU	903	—	II	—
22	2.5	BN / WH	967	—	II	—
23	0.35	BK	964	—	I	—
24	2.5	RD / BU	42	Battery Positive Voltage	II	—
25	2.5	RD / BU	42	Battery Positive Voltage	II	—
26	0.35	BK	962	—	I	—
27	2.5	BU	965	—	II	—
29	0.35	RD / BU	42	Battery Positive Voltage	II	—
30	0.35	RD / BU	42	Battery Positive Voltage	I	—
31	2.5	GY / BK	966	—	II	—
32	0.35	BK	961	—	I	—
33	2.5	RD / BU	42	Battery Positive Voltage	II	—
34	0.5	VT / GN	39	Run/Crank Ignition 1 Voltage	II	—

X51B Fuse Block - Instrument Panel Auxiliary Wire Entry (9L7) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
35	0.5	VT / GN	39	Run/Crank Ignition 1 Voltage	II	—
36	10	RD / BU	42	Battery Positive Voltage	I	—
37	0.35	BU	903	—	I	—
38	0.35	RD / BU	42	Battery Positive Voltage	I	—
39	2.5	RD / BU	42	Battery Positive Voltage	II	—
40	2.5	RD / BU	42	Battery Positive Voltage	II	—
41	2.5	RD / BU	42	Battery Positive Voltage	II	—
42	2.5	RD / BU	42	Battery Positive Voltage	II	—
43	2.5	RD / BU	42	Battery Positive Voltage	II	—

Component Connector End Views

A7 Fuel Pump and Level Sensor Assembly



3749582

Connector Part Information

Harness Type: Chassis
OEM Connector: 2-2109441-5
Service Connector: 19354078
Description: 8 <p01>-Way F 2.8 Series, Sealed(L-GY)

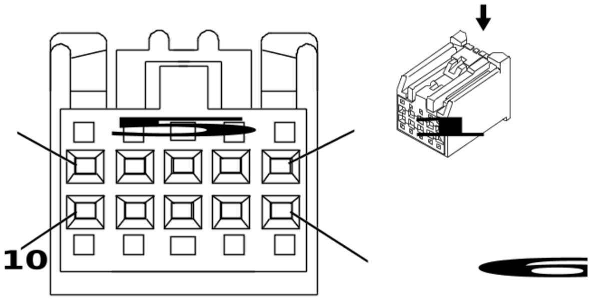
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

A7 Fuel Pump and Level Sensor Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY	120	Fuel Pump Control	I	—
2	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	I	—
3	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	I	—
4	0.5	BN	7444	Fuel Pump Assembly Shield Ground	I	—
5	0.5	BU / VT	1589	Primary Fuel Level Sensor Signal	I	—
6	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	I	—
7 - 8	—	—	—	Not Occupied	—	—

A10 Inside Rearview Mirror X1 (DD8/DRZ)



2180211

Connector Part Information

Harness Type: Headliner
OEM Connector: 13815336
Service Connector: 13577390
Description: 10 <p01>-Way F 0.64 Kaizen Series(BK)

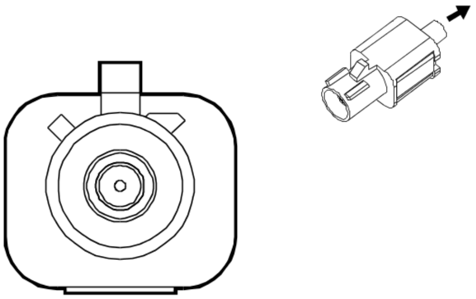
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575742	J-35616-64B (LT BU)	J-38125-215A

A10 Inside Rearview Mirror X1 (DD8/DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / WH	24	Backup Lamp Control	I	—
2	0.35	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	BK / WH	1851	Signal Ground	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.35	BK / YE	1691	Automatic Day/Night Mirror Low Reference	I	—
9	0.35	YE / WH	1690	Mirror Dimming Signal	I	—
10	—	—	—	Not Occupied	—	—

A10 Inside Rearview Mirror X2 (DRZ)



Connector Part Information

Harness Type: Headliner COAX
OEM Connector: 13594293
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way M Coax Type(BK)

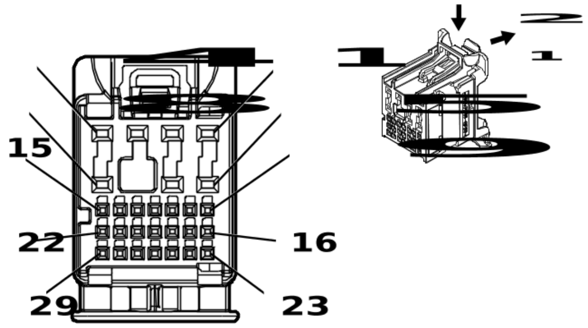
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A10 Inside Rearview Mirror X2 (DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Full Display Mirror Rear Camera Coaxial Video Signal	I	—

A11 Radio X1 (IOR)



4584346

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 160014-0012
Service Connector: 13534972
Description: 29 <p01>-Way F 0.5 NANO, 1.2 MCON Series(GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-16 (LT GN)	J-38125-559

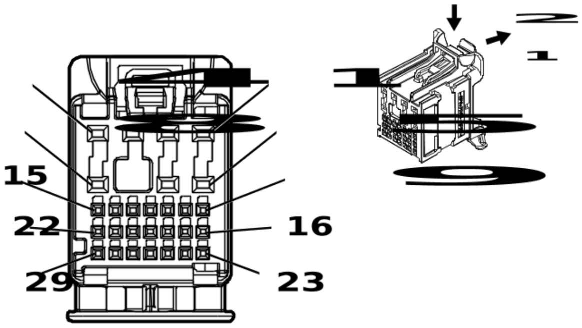
A11 Radio X1 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2340	Battery Positive Voltage	II	—
2	0.75	RD / YE	2340	Battery Positive Voltage	II	—
3	0.75	BK / WH	2751	Signal Ground	II	—
4	0.35	BU / RD	2807	Radio Keypad Voltage Reference	II	—
5	0.35	BK / GN	2804	Radio Display Backlight Low Reference	II	—
6	0.75	BK / WH	2751	Signal Ground	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN / BK	116	Left Rear Speaker [-] Control	II	—
9	0.35	GY / BU	2803	Radio Display Touch Interrupt Request Signal	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	GN / WH	24	Backup Lamp Control	I	—
12	0.35	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.35	BU / GY	2808	Radio Keypad Dimming Control	I	—
16 - 20	—	—	—	Not Occupied	—	—
21	0.35	GY / VT	3363	Navigation Display Dimming Control	I	—
22	0.35	BU / GN	2813	Radio Display Backlight Dimming Control	I	—
23	0.35	VT / BU	6091	Crankshaft Position Sensor Replicated Signal	I	—
24	0.35	BN / WH	2809	Radio Keypad Power Signal	I	—
25	0.35	VT / WH	2810	Radio Keypad Button Signal	I	—
26	0.35	BU	4315	Radio Volume Up Switch Signal	I	—

A11 Radio X1 (IOR) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.35	GY / BN	4314	Radio Volume Down Switch Signal	I	—
28 - 29	—	—	—	Not Occupied	—	—

A11 Radio X1 (IOS/IOT)



4496253

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 160014-0014
Service Connector: 13534974
Description: 29 <p01>-Way F 0.5 NANO, 1.2 MCON Series(BK)

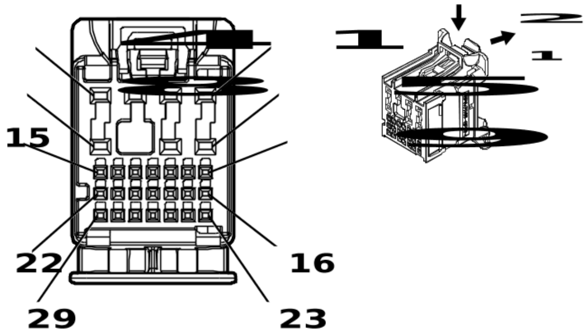
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-16 (LT GN)	J-38125-559

A11 Radio X1 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2340	Battery Positive Voltage	II	—
2	0.75	RD / YE	2340	Battery Positive Voltage	II	—
3	1	BK / WH	2751	Signal Ground	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	1	BK / WH	2751	Signal Ground	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN / BK	116	Left Rear Speaker [-] Control	II	—
9	0.35 0.35	GY / YE BU	5149 655	Voice Recognition Audio Signal Cellular Telephone Microphone Signal	I I	(IOS/ IOT) + UE1 (IOS/ IOT) - UE1
10	0.35 0.35	BK / GY BK / BN	5152 654	Voice Recognition Audio [-] Control Cellular Telephone Microphone Low Reference	I I	(IOS/ IOT) + UE1 (IOS/ IOT) - UE1
11	0.35	VT / YE	7043	Microphone [+] Signal	I	—
12	0.35	BU / BK	7044	Microphone [-]	I	—
13 - 29	—	—	—	Not Occupied	—	—

A11 Radio X2 (IOR)



4584398

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 160014-0013
Service Connector: 13534973
Description: 29 <p01>-Way F 0.5 NANO, 1.2 MCON Series(GY)

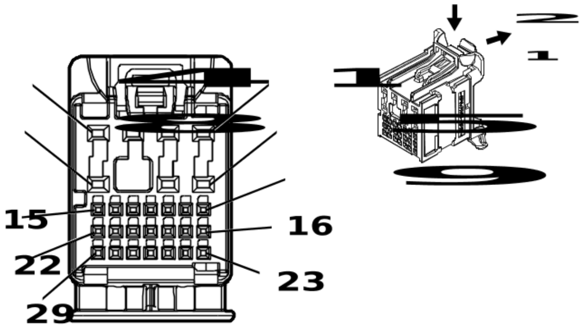
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-16 (LT GN)	J-38125-215A
III	84729890	J-35616-16 (LT GN)	J-38125-559

A11 Radio X2 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	199	Left Rear Speaker [+] Control	II	—
2	0.75	BU	201	Left Front Speaker 1 [+] Control	III	—
3	0.75	YE	200	Right Front Speaker 1 [+] Control	III	—
4	0.5	BU / BK	115	Right Rear Speaker [-] Control	II	—
5	0.75	BN / BU	118	Left Front Speaker [-] Control 1	III	—
6	0.75	YE / BK	117	Right Front Speaker [-] Control 1	III	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	46	Right Rear Speaker [+] Control	II	—
9	0.35 0.35	BK / GY BK / BN	5152 654	Voice Recognition Audio [-] Control Cellular Telephone Microphone Low Reference	I I	IOR+ UE1 IOR- UE1
10	0.35 0.35	GY / YE BU	5149 655	Voice Recognition Audio Signal Cellular Telephone Microphone Signal	I I	IOR+ UE1 IOR- UE1
11	—	—	—	Not Occupied	—	—
12	0.35	GY / YE	6972	Rearview Camera Signal [+]	I	—
13	0.35	WH / BU	6973	Rearview Camera Signal [-]	I	—
14 - 29	—	—	—	Not Occupied	—	—

A11 Radio X2 (IOS/IOT)



4578560

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 160014-0011
Service Connector: 13534971
Description: 29 <p01>-Way F 0.5 NANO, 1.2 MCON Series(GY)

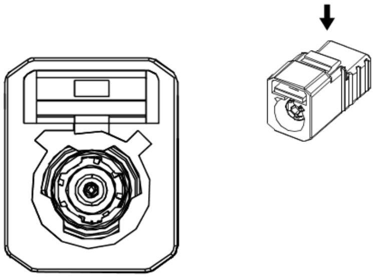
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-16 (LT GN)	J-38125-559

A11 Radio X2 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	199	Left Rear Speaker [+] Control	II	—
2	0.75	BU	201	Left Front Speaker 1 [+] Control	II	—
3	0.75	YE / BK	117	Right Front Speaker [-] Control 1	II	—
4	0.5	BU / BK	115	Right Rear Speaker [-] Control	II	—
5	0.75	BN / BU	118	Left Front Speaker [-] Control 1	II	—
6	0.75	YE	200	Right Front Speaker 1 [+] Control	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	46	Right Rear Speaker [+] Control	II	—
9	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
10	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—
11	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
12	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—
13	0.35	GN / WH	24	Backup Lamp Control	I	—
14 - 17	—	—	—	Not Occupied	—	—
18	0.35	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
19 - 27	—	—	—	Not Occupied	—	—
28	0.35	WH / BU	5986	Serial Data Communication Enable	I	—
29	—	—	—	Not Occupied	—	—

A11 Radio X3 (IOR)



Connector Part Information

Harness Type: Antenna COAX
OEM Connector: 13581686
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

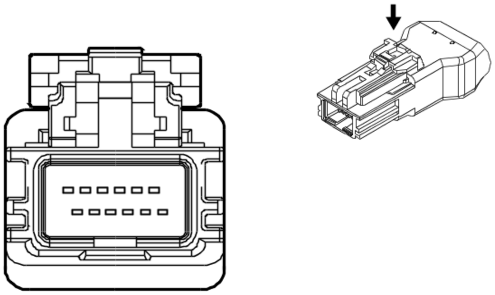
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X3 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(AM/FM) Antenna RF Signal	I	—

A11 Radio X3 (IOS/IOT)



4527210

Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 35148576
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12 <p01>-Way M 2.0 HSAL-2 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X3 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	(Infotainment) Infotainment Display Signal	I	—

A11 Radio X4 ((IOS/IOT)+D07)

—

Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 35149509
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12 <p01>-Way M 2.0 HSAL-2 Series(BK)

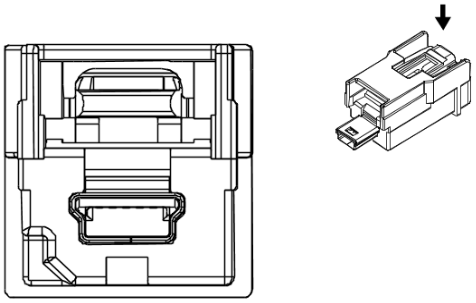
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X4 ((IOS/IOT)+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

A11 Radio X4 (IOR+(UIR/UIJ))



2807491

Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 35149722
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type

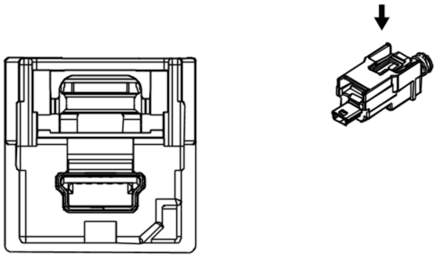
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X4 (IOR+(UIR/UIJ))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

A11 Radio X5 (IOR)



Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 13584746
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X5 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

A11 Radio X5 (UVB/UVI/UV2)

—

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35097347
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F

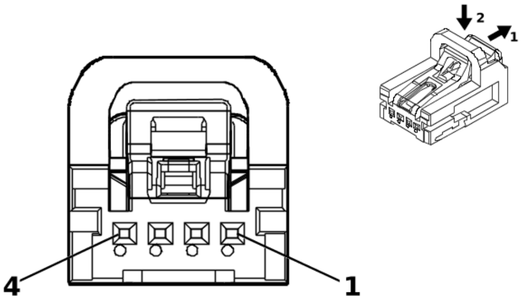
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X5 (UVB/UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
OG	—	—	Coax Cable	Coax Cable	I	—

A11 Radio X6 (IOR)



5200696

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35068218
Service Connector: 84769202
Description: 4 <p01>-Way F Mini 50 Series(BK)

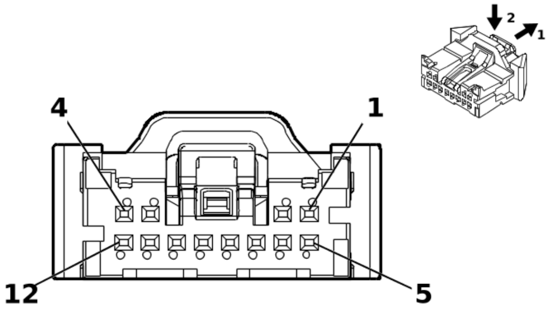
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

A11 Radio X6 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	GY / WH	7211	Ethernet Bus 4 [+]	I	—
3	0.35	GY	7210	Ethernet Bus 4 [-]	I	—
4	—	—	—	Not Occupied	—	—

A11 Radio X6 (IOS/IOT)



5360826

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35068239
Service Connector: 13529935
Description: 12 <p01>-Way F 050 CTS Series(BK)

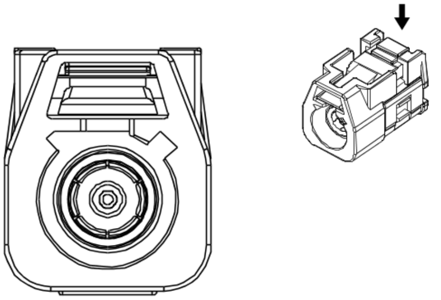
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	EL-35616-58 (BK)	EL-38125-58

A11 Radio X6 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	GY / BU	7217	Ethernet Bus 7 [+]	I	—
4	0.35	BN / BU	7216	Ethernet Bus 7 [-]	I	—
5 - 7	—	—	—	Not Occupied	—	—
8	0.35	GY / BK	7215	Ethernet Bus 6 [+]	I	—
9	0.35	BN / BK	7214	Ethernet Bus 6 [-]	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	GY / WH	7211	Ethernet Bus 4 [+]	I	—
12	0.35	GY	7210	Ethernet Bus 4 [-]	I	—

A11 Radio X7 (IOS/IOT)



Connector Part Information

Harness Type: Antenna COAX
OEM Connector: 13583834
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

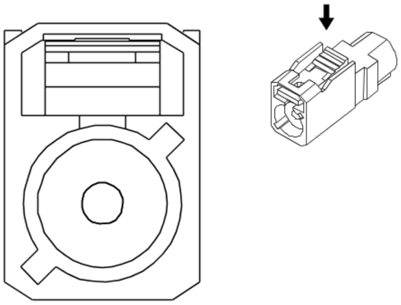
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X7 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(AM/FM) Antenna RF Signal	I	—

A11 Radio X8 ((IOS/IOT)-UE1)



3633612

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type

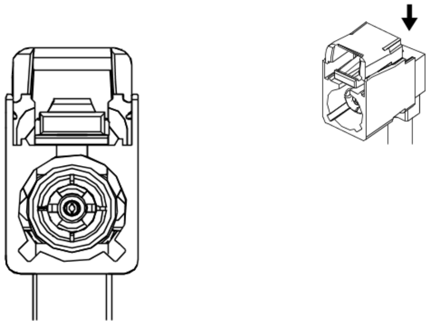
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X8 ((IOS/IOT)-UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(GPS only) Coaxial Antenna GPS Signal	I	—

A11 Radio X8 (IOR+U2K)



3028804

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 35150035
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type

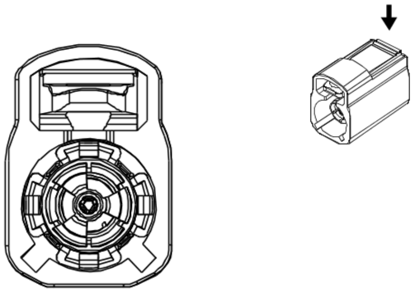
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X8 (IOR+U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(XM +/-HD) Coaxial Antenna XM Signal	I	—

A11 Radio X9 ((IOS/IOT)+U2K)



4044034

Connector Part Information

Harness Type: Instrument Panel COAX

OEM Connector: 35150036

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type

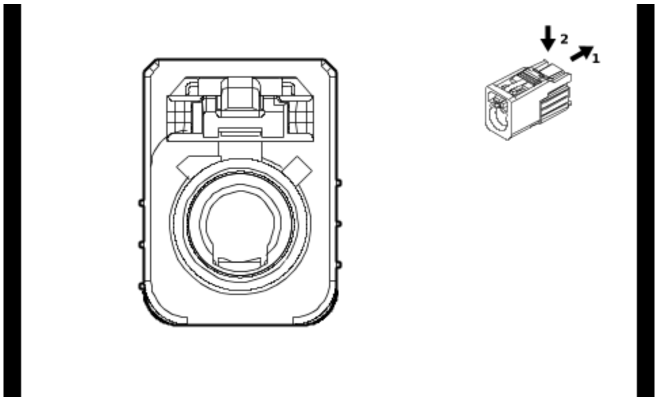
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X9 ((IOS/IOT)+U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(XM +/-HD) Coaxial Antenna XM Signal	I	—

A11 Radio X11 (IOS/IOT)



5660978

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13516044
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

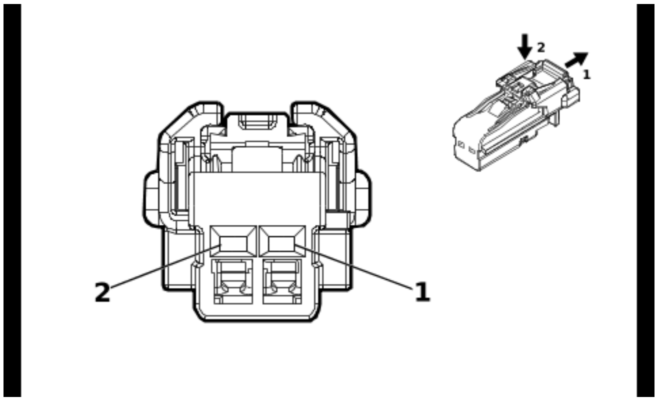
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X11 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BG	—	—	Coax Cable	Coax Cable	I	—

A14D Seat Lumbar Support Pump - Driver (A2X-A45)



4115691

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

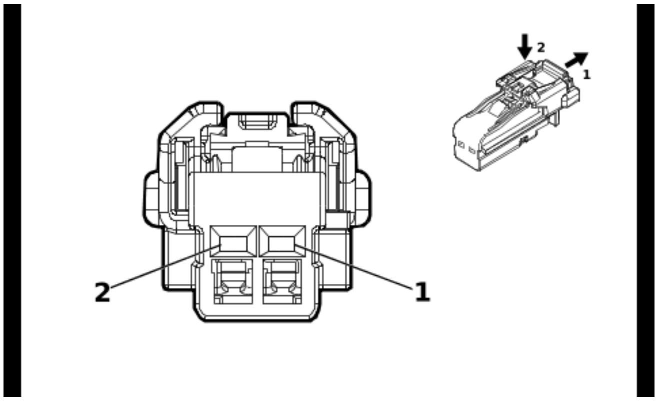
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

A14D Seat Lumbar Support Pump - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	611	Driver Seat Lumbar Support Motor Forward Control	I	—
2	0.75	VT	610	Driver Seat Lumbar Support Motor Backward Control	I	—

A14P Seat Lumbar Support Pump - Passenger (A7K)



4115691

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

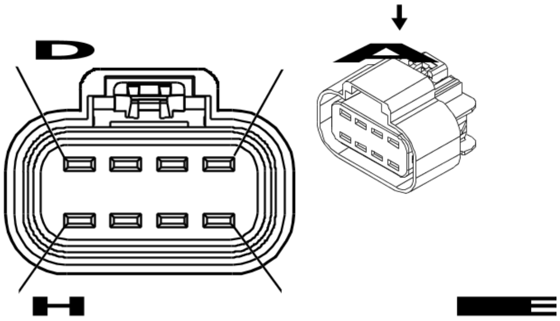
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

A14P Seat Lumbar Support Pump - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	211	Passenger Seat Lumbar Support Motor Forward Control	I	—
2	0.75	VT	210	Passenger Seat Lumbar Support Motor Backward Control	I	—

A16 Transfer Case Motor (NP0/NQH)



646372

Connector Part Information

Harness Type: Engine
OEM Connector: 13538370
Service Connector: 19369184
Description: 8 <p01>-Way F 280 GT Series, Sealed(BK)

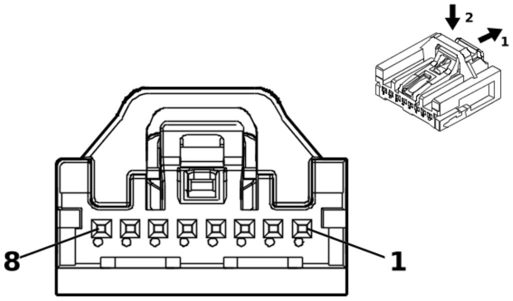
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

A16 Transfer Case Motor (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	YE / GY	1552	Transfer Case Motor Clockwise Control	I	—
B	0.75	BK	952	—	I	—
C	0.75	YE / BN	1569	Transfer Case Lock Solenoid Valve Control	I	—
D	3	YE / VT	1553	Transfer Case Motor Counter Clockwise Control	I	—
E	0.5	YE	7474	Incremental Encoder Direction Signal	I	—
F	0.5	BU / GY	7473	Incremental Encoder Impulse Signal	I	—
G	0.5	WH / GN	7475	Incremental Encoder Sensor 8V Reference	I	—
H	0.5	VT	7476	Incremental Encoder Sensor Low Reference	I	—

A22 Radio Controls (IOR)



5200269

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35068228
Service Connector: 84769201
Description: 8 <p01>-Way F Mini 50 Series(BK)

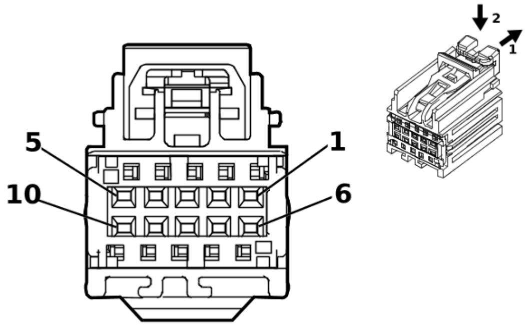
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

A22 Radio Controls (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / RD	2807	Radio Keypad Voltage Reference	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BN / WH	2809	Radio Keypad Power Signal	I	—
4	0.35	BK / YE	2806	Radio Keypad Low Reference	I	—
5	0.35	BU / GY	2808	Radio Keypad Dimming Control	I	—
6	0.35	VT / WH	2810	Radio Keypad Button Signal	I	—
7	0.35	BU	4315	Radio Volume Up Switch Signal	I	—
8	0.35	GY / BN	4314	Radio Volume Down Switch Signal	I	—

A23D Door Latch Assembly - Driver



4622549

Connector Part Information

Harness Type: Driver Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 YESC Kaizen Series(GN)

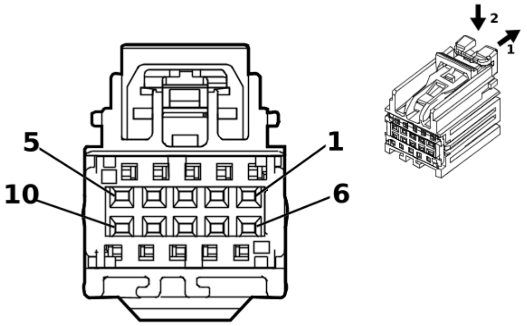
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

A23D Door Latch Assembly - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	GY PK	745 745	Left Front Door Ajar Switch Signal Left Front Door Ajar Switch Signal	I I	A6Q AXG
2	0.5	WH / YE	3574	Driver Door Open Switch Signal	I	—
3	0.75	BK	1150	Ground	I	—
4	0.35	WH / VT	3270	Driver Door Lock Motor Status Signal	I	—
5	0.5	BU / VT	1124	Door Lock Key Switch Unlock Signal	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
8	0.75	BN / YE	294	Door Lock Actuator Unlock Control	I	—
9 - 10	—	—	—	Not Occupied	—	—

A23LR Door Latch Assembly - Left Rear (EXTENDED CAB/CREW CAB)



4622549

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 YESC Kaizen Series(GN)

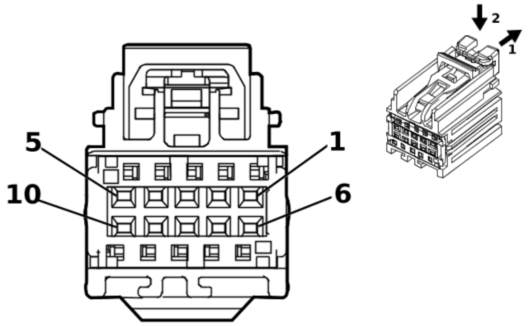
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

A23LR Door Latch Assembly - Left Rear (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	GY GN	747 747	Left Rear Door Ajar Switch Signal Left Rear Door Ajar Switch Signal	I I	CREW CAB+ AEQ EXTENDED CAB+ AEQ
2	—	—	—	Not Occupied	—	—
3	0.75	BK	1150	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.75	GY	295	Door Lock Actuator Lock Control	I	—
8	0.75	BN / YE	294	Door Lock Actuator Unlock Control	I	—
9 - 10	—	—	—	Not Occupied	—	—

A23P Door Latch Assembly - Passenger



4622549

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 YESC Kaizen Series(GN)

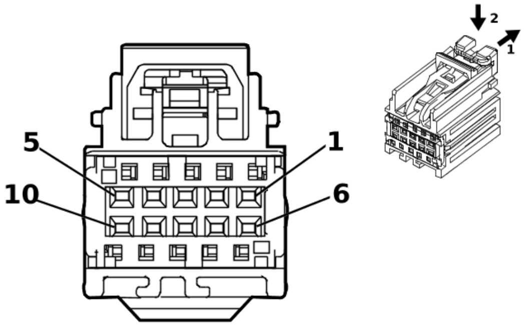
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

A23P Door Latch Assembly - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	GY	746	Right Front Door Ajar Switch Signal	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.75	BN / YE	294	Door Lock Actuator Unlock Control	I	—
9	0.75	GY	295	Door Lock Actuator Lock Control	I	—
10	—	—	—	Not Occupied	—	—

A23RR Door Latch Assembly - Right Rear (EXTENDED CAB/CREW CAB)



4622549

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 YESC Kaizen Series(GN)

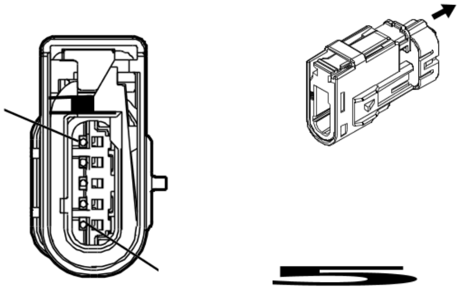
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

A23RR Door Latch Assembly - Right Rear (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	GN	748	Right Rear Door Ajar Switch Signal	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.75	BN / YE	294	Door Lock Actuator Unlock Control	I	—
9	0.75	GY	295	Door Lock Actuator Lock Control	I	—
10	—	—	—	Not Occupied	—	—

A24D Door Handle Assembly - Driver Exterior



4808321

Connector Part Information

Harness Type: Driver Door
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5 <p01>-Way M 1.2 Series, Sealed(NA)

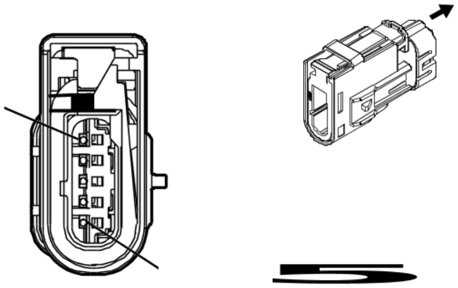
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

A24D Door Handle Assembly - Driver Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	3570	Driver Door Handle Switch Signal	I	—
2	0.5	VT	3560	Driver Door Passive Entry Antenna High Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	VT / GY	3561	Driver Door Passive Entry Antenna Low Signal	I	—
5	0.75	BK	1150	Ground	I	—

A24LR Door Handle Assembly - Left Rear Exterior (EXTENDED CAB/CREW CAB)



4808325

Connector Part Information

Harness Type: Left Rear Door

OEM Connector: 35028907

Service Connector: Service by Harness - See Part Catalog

Description: 5 <p01>-Way M 1.2 Series, Sealed(BK)

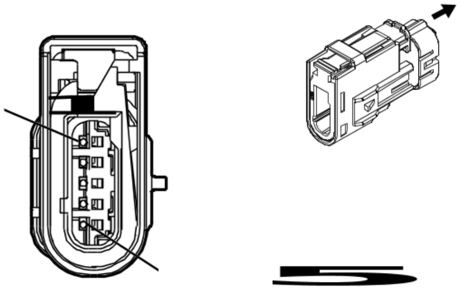
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

A24LR Door Handle Assembly - Left Rear Exterior (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	PK	6157	Left Rear Door Handle Switch Signal	I	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.75	BK	1150	Ground	I	—

A24P Door Handle Assembly - Passenger Exterior



4808321

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5 <p01>-Way M 1.2 Series, Sealed(NA)

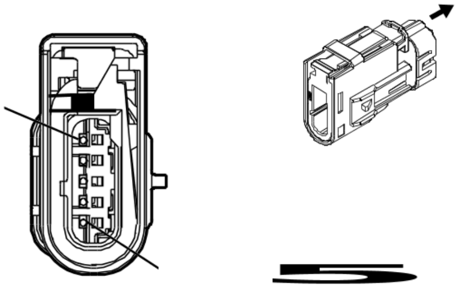
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

A24P Door Handle Assembly - Passenger Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	3571	Passenger Door Handle Switch Signal	I	—
2	0.5	GN / YE	3562	Passenger Door Passive Entry Antenna High Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GN / BK	3563	Passenger Door Passive Entry Antenna Low Signal	I	—
5	0.75	BK	1250	Ground	I	—

A24RR Door Handle Assembly - Right Rear Exterior (EXTENDED CAB/CREW CAB)



4808325

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 35028907
Service Connector: Service by Harness - See Part Catalog
Description: 5 <p01>-Way M 1.2 Series, Sealed(BK)

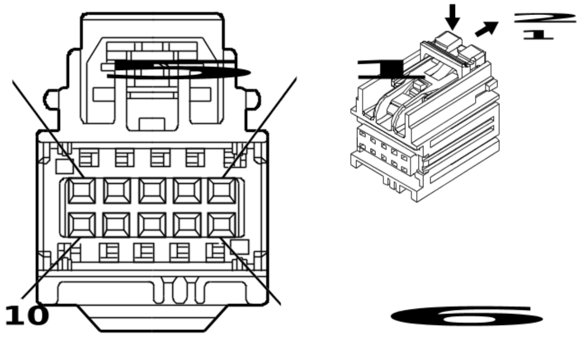
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

A24RR Door Handle Assembly - Right Rear Exterior (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GY	6158	Right Rear Door Handle Switch Signal	I	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.75	BK	1250	Ground	I	—

A26 HVAC Controls



4822741

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 7289-4886-30
Service Connector: 13509648
Description: 10 <p01>-Way F 0.64 YESC Kaizen Series(BK)

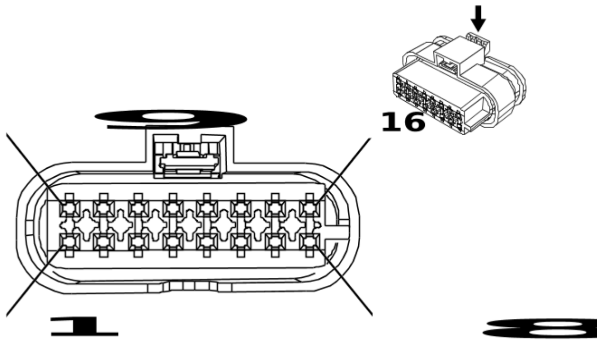
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19331015	J-35616-64B (LT BU)	J-38125-215A

A26 HVAC Controls

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	1340	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
4 - 8	—	—	—	Not Occupied	—	—
9	0.35	GN / YE	7531	HVAC Control Module LIN Bus 1	I	—
10	0.5	BK / WH	1851	Signal Ground	I	—

A39 Reductant Tank (LM2)



4259227

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 33210848
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way F 1.2 MLK Series, Sealed(BK)

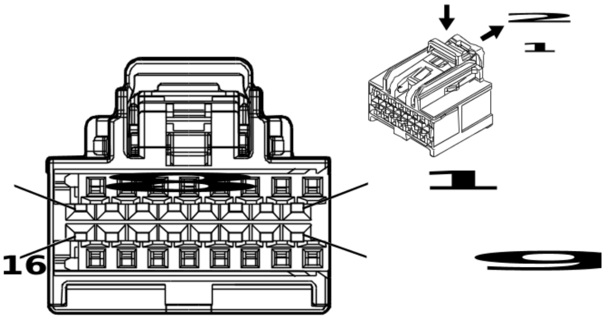
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

A39 Reductant Tank (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	3244	Diesel Exhaust Fluid Tank Temperature Sensor Signal	I	—
2	0.5	BN	3245	Diesel Exhaust Fluid Tank Temperature Sensor Low Reference	I	—
3	0.5	BU	3107	Diesel Exhaust Fluid Pressure Sensor Low Reference	I	—
4	0.5	BU	3108	Diesel Exhaust Fluid Pressure Sensor Signal	I	—
5	0.5	BN	3106	Diesel Exhaust Fluid Pressure Sensor 5 Volt Reference	I	—
6	—	—	—	Not Occupied	—	—
7	1	WH	3103	Diesel Exhaust Fluid Smart Pump Control	I	—
8	1	BN	3875	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 2	I	—
9	1	YE	3677	Diesel Exhaust Fluid Reservoir Heater Control	I	—
10	0.5	BN	3676	Diesel Exhaust Fluid Heating Tank 2 Heater Control	I	—
11	1	BU	4318	Diesel Exhaust Fluid Tank Heater Low Control	I	—
12 - 13	—	—	—	Not Occupied	—	—
14	1	BU	2937	Diesel Exhaust Fluid Pump Motor Stator Low Reference	I	—
15	1	BN	2936	Diesel Exhaust Fluid Heating Tank 2 Heater Control Low	I	—
16	1	YE	3876	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 3	I	—

A98 Front Overhead Console Assembly X1



4873254

Connector Part Information

Harness Type: Headliner
OEM Connector: 35016344
Service Connector: 13519739
Description: 16 <p01>-Way F 0.64 OCS Series(GY)

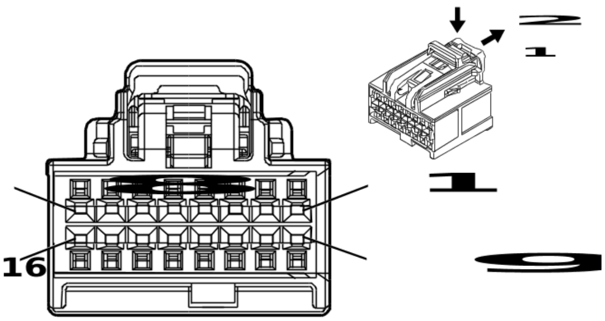
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300660	J-35616-64B (LT BU)	J-38125-12A

A98 Front Overhead Console Assembly X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	157	Interior Lamp Control	I	—
2	0.5	WH / BN	6815	Inadvertent Load Control	I	—
3	0.35	WH	6816	Indicator Dimming Control	I	—
4	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
5	0.5	BK	1050	Ground	I	—
6	0.35	BU	2307	Passenger Air Bag On Indicator Control	I	—
7	0.35	GN	2308	Passenger Air Bag Off Indicator Control	I	—
8	0.35	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
9	0.35	VT / WH	5234	Passenger Seat Belt Indicator Control	I	—
10	0.35	GY	156	Courtesy Lamp Switch Signal	I	—
11	0.35	GY / GN	328	Interior Lamp Defeat Switch Signal	I	—
12	0.35	BK / WH	1851	Signal Ground	I	—
13	0.35	BU / GY	4672	Dome Lamp Off Indicator Control	I	—
14	0.35	VT / GN	7558	Front Footwell Accent Lighting Control	I	—
15 - 16	—	—	—	Not Occupied	—	—

A98 Front Overhead Console Assembly X2



4873243

Connector Part Information

Harness Type: Headliner
OEM Connector: 35016343
Service Connector: 13519738
Description: 16 <p01>-Way F 0.64 OCS Series(BK)

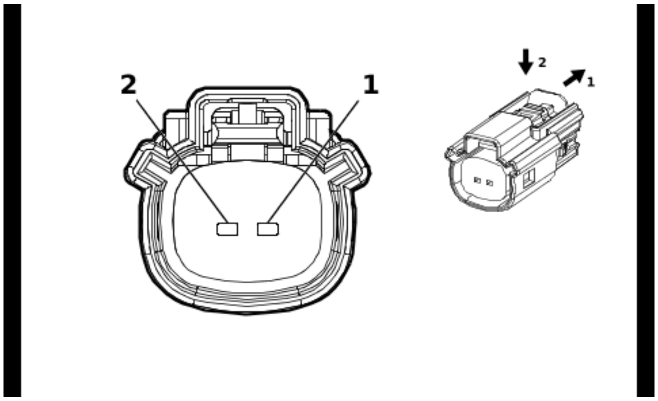
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354230	J-35616-64B (LT BU)	J-38125-12A

A98 Front Overhead Console Assembly X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / VT	2516	Telematics Switch Green LED Indicator Control	I	—
2	0.35	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
3	0.35	GN / WH	2514	Telematics Switch Signal	I	—
4	0.35	GN / BK	2515	Telematics Switch Supply Voltage	I	—
5	0.35	YE / VT	6191	Power Rear Window Switch Open Signal	I	—
6	0.35	WH	6192	Sliding Rear Window Switch Close Signal	I	—
7	0.35	VT / YE	43	Accessory Ignition Voltage	I	—
8	0.35	RD / YE	240	Battery Positive Voltage	I	—
9	0.35	BU / VT	5027	Sunroof Switch Serial Data 1 Signal	I	—
10	0.35	WH / GN	3031	Sunroof Vent Switch Signal	I	—
11	0.35	BK / GY	128	Sunroof Switch Low Reference	I	—
12 - 16	—	—	—	Not Occupied	—	—

A99C Pickup Box Endgate Latch - Center (QK1+QT5)



2474713

Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

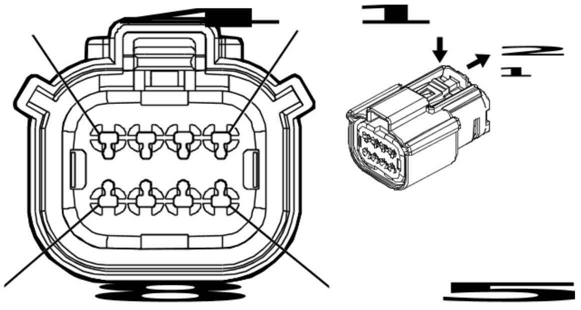
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A99C Pickup Box Endgate Latch - Center (QK1+QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	1299	Major Endgate Motor Control	I	—
2	0.5	YE / BK	7730	Major Endgate Motor Low Reference	I	—

A99L Pickup Box Endgate Latch - Left (QK1)



4846407

Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

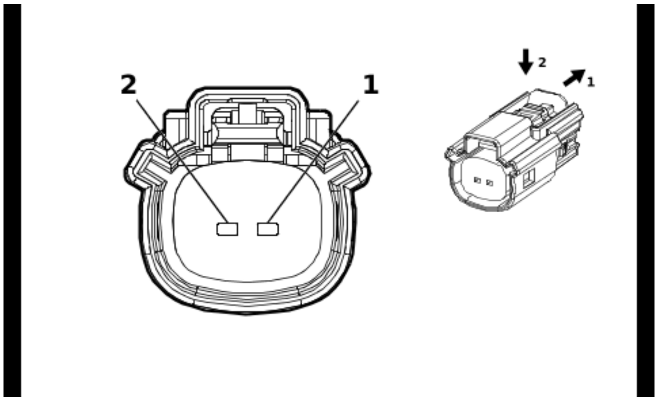
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A99L Pickup Box Endgate Latch - Left (QK1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	GY / VT	4678	Rear Closure Latch Unlatch Status	I	—
3	0.35	BU / BK	4665	Rear Closure Latch Ratchet Status	I	—
4	0.5	BK / VT	4656	Rear Closure Object Sensor Low Reference	I	—
5	1	BN	4681	Rear Closure Cinch Latch Motor Cinch Control	I	—
6	1	BU / GY	4682	Rear Closure Cinch Latch Motor Release Control	I	—
7	0.35	GN / BK	4659	Rear Closure Open Switch Signal	I	—
8	0.5	PK / BK	4668	Rear Closure Latch Pawl Status Signal	I	—

A99L Pickup Box Endgate Latch - Left (QK2)



2474713

Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

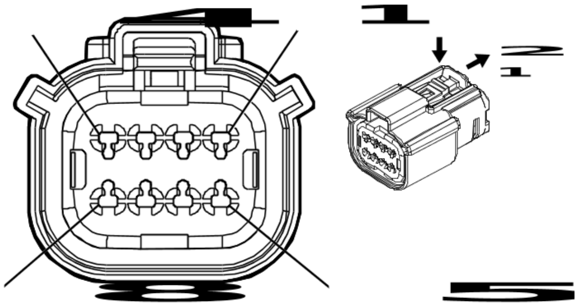
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A99L Pickup Box Endgate Latch - Left (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN	1299	Major Endgate Motor Control	I	—
2	0.75	YE / BK	7730	Major Endgate Motor Low Reference	I	—

A99R Pickup Box Endgate Latch - Right (QK1)



4846407

Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

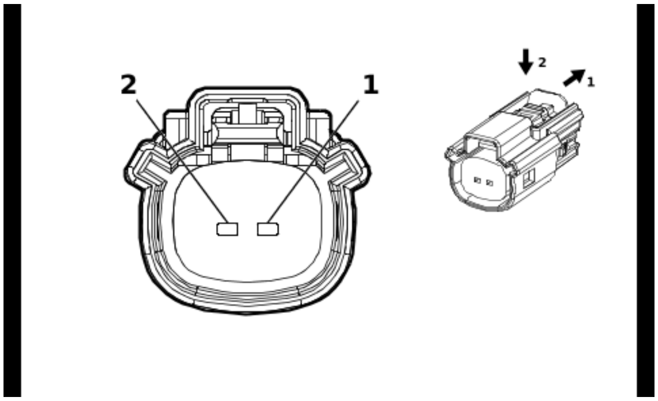
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A99R Pickup Box Endgate Latch - Right (QK1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BK	1575	Rear Closure Sensor Low Reference 2	I	—
2	0.35	YE / RD	7734	Rear Closure Latch 2 Ratchet Status Signal	I	—
3	0.5	VT	7736	Rear Closure Latch 2 Unlatch Status Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7735	Rear Closure Latch 2 Pawl Status Signal	I	—
6	0.35	OG	7733	Rear Closure Latch 2 Sector Status Signal	I	—
7	1	PK	1499	Rear Closure Cinch Latch Motor 2 Cinch Control	I	—
8	1	BU	1509	Rear Closure Cinch Latch Motor 2 Release Control	I	—

A99R Pickup Box Endgate Latch - Right (QK2)



2474713

Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

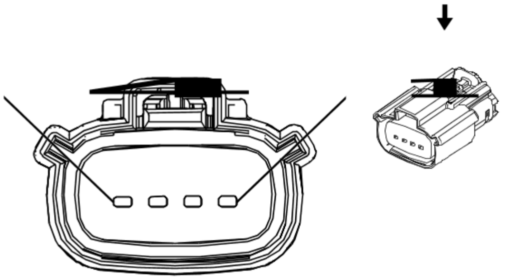
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A99R Pickup Box Endgate Latch - Right (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN	1299	Major Endgate Motor Control	I	—
2	0.75	YE / BK	7730	Major Endgate Motor Low Reference	I	—

A100L Pickup Box Auxiliary Endgate Latch - Left (QK2+QT5)



2474747

Connector Part Information

Harness Type: Endgate
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

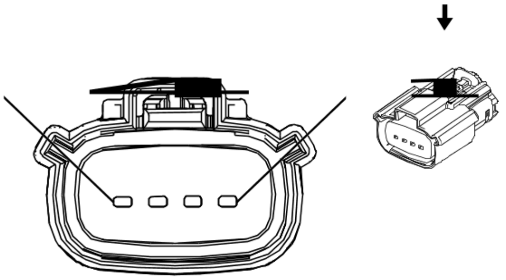
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A100L Pickup Box Auxiliary Endgate Latch - Left (QK2+QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	7295	Left Minor Endgate Ajar Signal	I	—
2	0.75	BK	1450	Ground	I	—
3	0.5	BN / BK	7726	Minor Endgate Motor Low Reference	I	—
4	0.5	VT	7725	Minor Endgate Motor Control	I	—

A100R Pickup Box Auxiliary Endgate Latch - Right (QK2+QT5)



2474747

Connector Part Information

Harness Type: Endgate
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

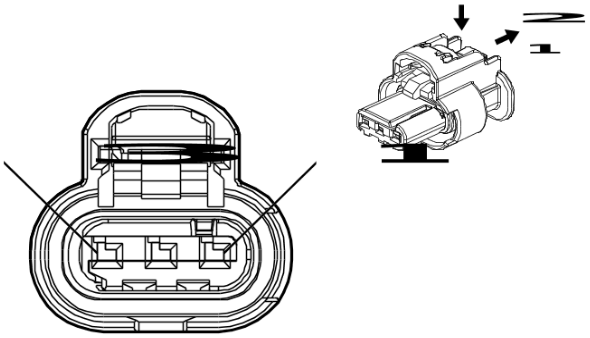
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A100R Pickup Box Auxiliary Endgate Latch - Right (QK2+QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / BK	7726	Minor Endgate Motor Low Reference	I	—
2	0.5	VT	7725	Minor Endgate Motor Control	I	—
3	0.35	WH / BN	7296	Right Minor Endgate Ajar Signal	I	—
4	0.75	BK	1450	Ground	I	—

B1 A/C Refrigerant Pressure Sensor (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

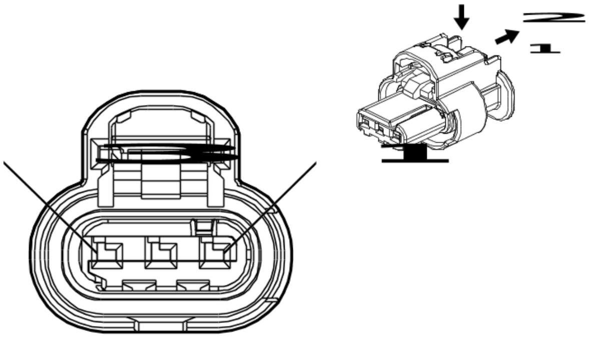
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B1 A/C Refrigerant Pressure Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B1 A/C Refrigerant Pressure Sensor (L82)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

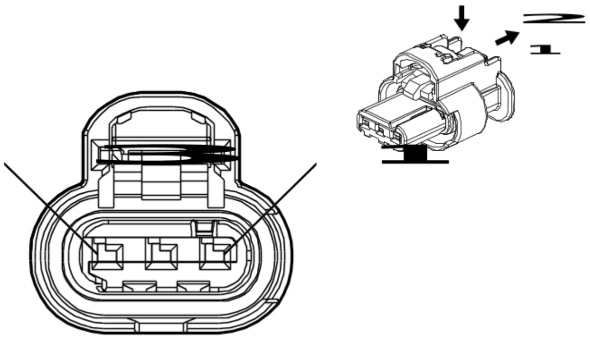
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B1 A/C Refrigerant Pressure Sensor (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B1 A/C Refrigerant Pressure Sensor (L84/L87)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

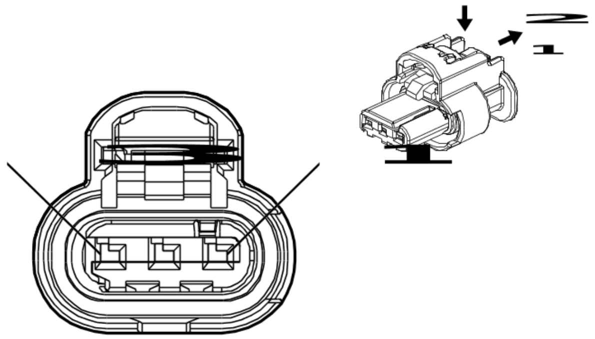
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B1 A/C Refrigerant Pressure Sensor (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B1 A/C Refrigerant Pressure Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

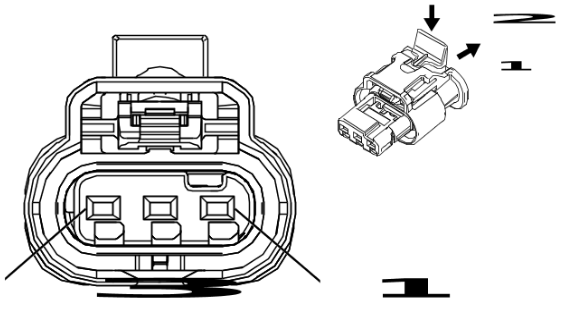
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B1 A/C Refrigerant Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B1 A/C Refrigerant Pressure Sensor (LV3)



4249125

Connector Part Information

Harness Type: Engine
OEM Connector: 4-2272004-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCP Series, Sealed(BN)

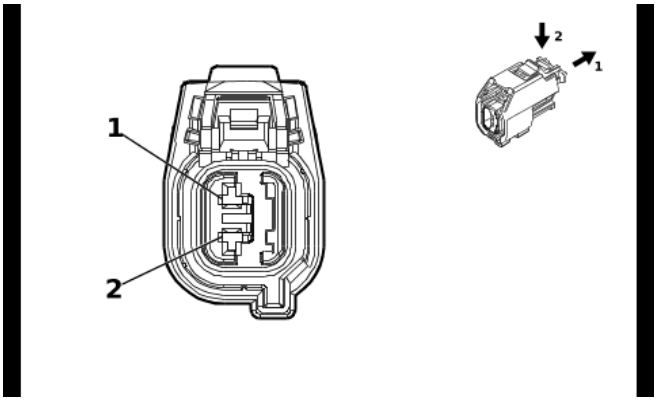
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B1 A/C Refrigerant Pressure Sensor (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B5LF Wheel Speed Sensor - Left Front



5666214

Connector Part Information

Harness Type: Chassis
OEM Connector: 33189092
Service Connector: 85526683
Description: 2 <p01>-Way F 1.5 OCS Series, Sealed(BK)

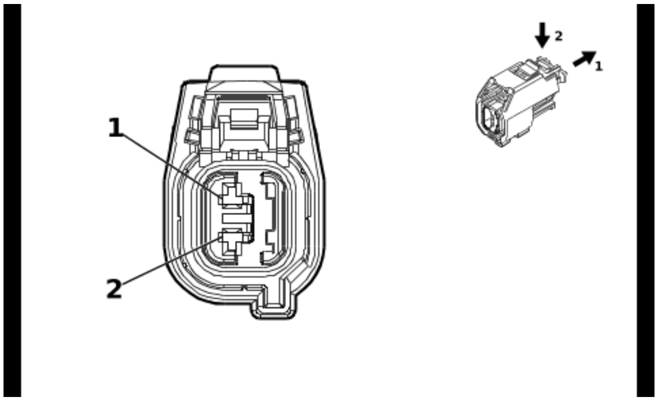
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5LF Wheel Speed Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	7064	Left Front Wheel Speed Sensor Control	I	—
2	0.5	GY	830	Left Front Wheel Speed Sensor Signal	I	—

B5LR Wheel Speed Sensor - Left Rear



5666214

Connector Part Information

Harness Type: Chassis
OEM Connector: 33189092
Service Connector: 85526683
Description: 2 <p01>-Way F 1.5 OCS Series, Sealed(BK)

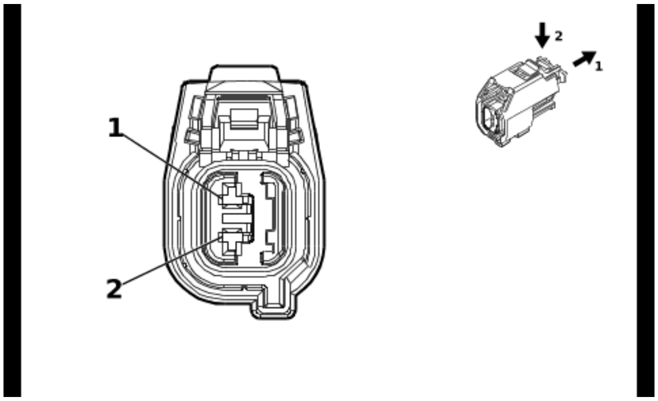
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5LR Wheel Speed Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BK	7127	Left Rear Wheel Speed Sensor Control	I	—
2	0.5	BU	884	Left Rear Wheel Speed Sensor Signal	I	—

B5RF Wheel Speed Sensor - Right Front



5666214

Connector Part Information

Harness Type: Chassis
OEM Connector: 33189092
Service Connector: 85526683
Description: 2 <p01>-Way F 1.5 OCS Series, Sealed(BK)

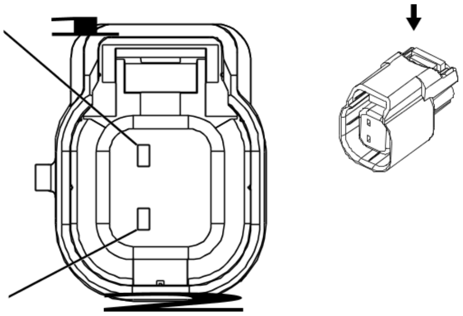
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5RF Wheel Speed Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BN	7065	Right Front Wheel Speed Sensor Control	I	—
2	0.5	YE	872	Right Front Wheel Speed Sensor Signal	I	—

B5RR Wheel Speed Sensor - Right Rear



4115616

Connector Part Information

Harness Type: Chassis
OEM Connector: 34062-0046
Service Connector: 19366860
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

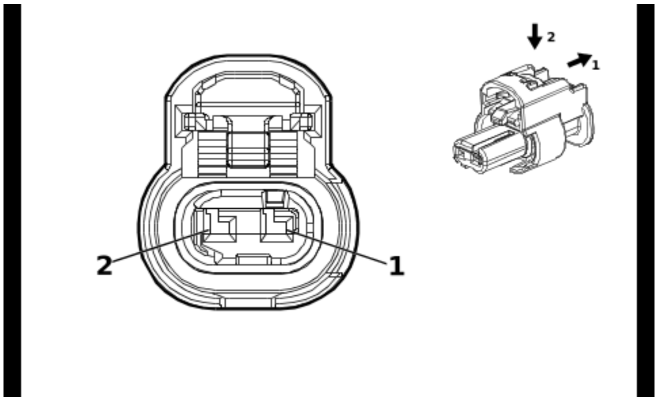
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5RR Wheel Speed Sensor - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / YE	7128	Right Rear Wheel Speed Sensor Control	I	—
2	0.5	VT	882	Right Rear Wheel Speed Sensor Signal	I	—

B9 Ambient Air Temperature Sensor



4649903

Connector Part Information

Harness Type: Passenger Outside Rearview Mirror
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

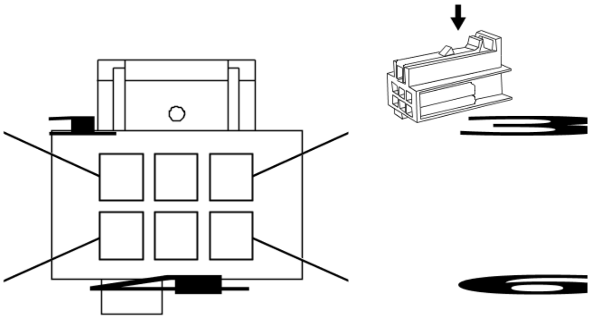
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B9 Ambient Air Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD	636	Ambient Air Temperature Sensor Signal	I	—
2	0.5	WH	580	Engine Control Sensors Low Reference 2	I	—

B10B Ambient Light/Sunload Sensor (C4P/CJ2)



2282896

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13590886
Service Connector: 19333315
Description: 6 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

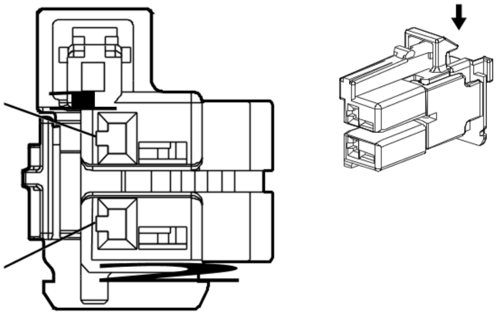
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B10B Ambient Light/Sunload Sensor (C4P/CJ2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	590	Driver Solar Sensor Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	WH / BU	278	Ambient Light Sensor Signal	I	—
4	0.35	BU / WH	734	Inside Air Temperature Sensor Signal	I	—
5	0.35	GY	728	Security Indicator Control	I	—
6	0.35	BK / GN	7567	Solar Sensor Low Reference	I	—

B13 Transmission Fluid Temperature Sensor (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B13 Transmission Fluid Temperature Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / BN	586	Transmission Fluid Temperature Sensor Low Reference	I	—
2	0.5	BN / YE	585	Transmission Fluid Temperature Sensor Signal	I	—

B13 Transmission Fluid Temperature Sensor (MQE)

—

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 312004
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F

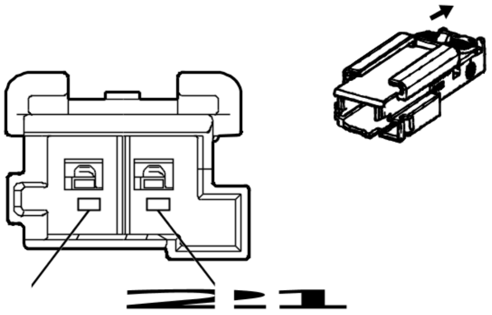
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B13 Transmission Fluid Temperature Sensor (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	I	—
2	0.5	BK / BN	585	Transmission Fluid Temperature Sensor Signal	I	—

B14A Transmission Output Shaft Speed Sensor (MQB)



4672593

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-2
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series(BU)

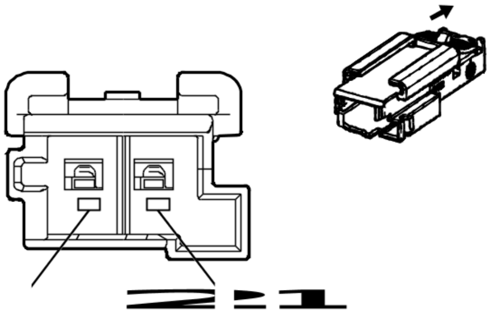
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14A Transmission Output Shaft Speed Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / OG	6358	Output Speed Signal	I	—
2	0.5	GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—

B14C Transmission Input Shaft Speed Sensor (MQB)



4672611

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-3
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series(GN)

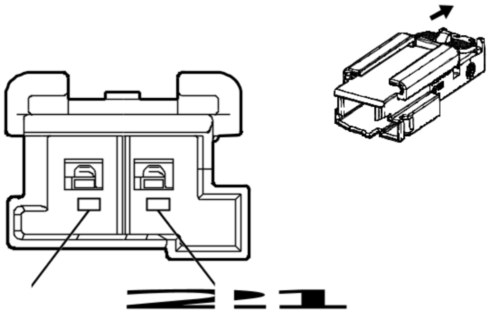
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14C Transmission Input Shaft Speed Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / VT	6353	Input Speed Signal	I	—
2	0.5	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—

B14DA Transmission Intermediate Speed Sensor 1 (MQB)



4663490

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series(NA)

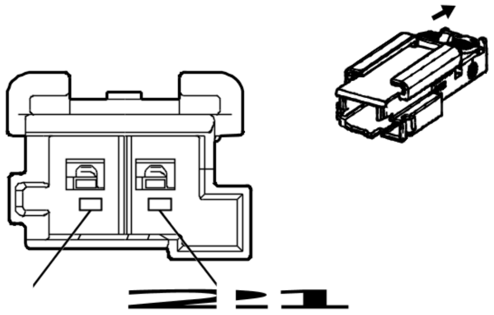
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14DA Transmission Intermediate Speed Sensor 1 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / GN	4510	Transmission Intermediate Speed Signal	I	—
2	0.5	GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—

B14DB Transmission Intermediate Speed Sensor 2 (MQB)



4672593

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-2
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series(BU)

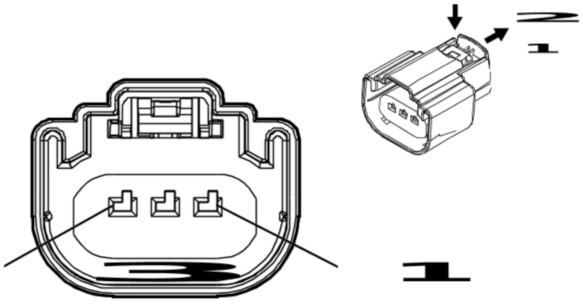
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14DB Transmission Intermediate Speed Sensor 2 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	4510	Transmission Intermediate Speed Signal	I	—
2	0.5	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—

B18 Battery Current Sensor (-KL9)



4569745

Connector Part Information

Harness Type: Body
OEM Connector: 33343869
Service Connector: 19179750
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(BK)

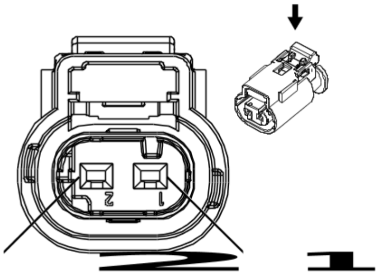
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B18 Battery Current Sensor (-KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / VT	5076	Current Sensor Voltage Reference	I	—
2	0.35	BK / VT	5077	Current Sensor Low Reference	I	—
3	0.35	WH / YE	5075	Current Sensor Signal	I	—

B20 Brake Fluid Level Switch



2717066

Connector Part Information

Harness Type: Body
OEM Connector: 13735326
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

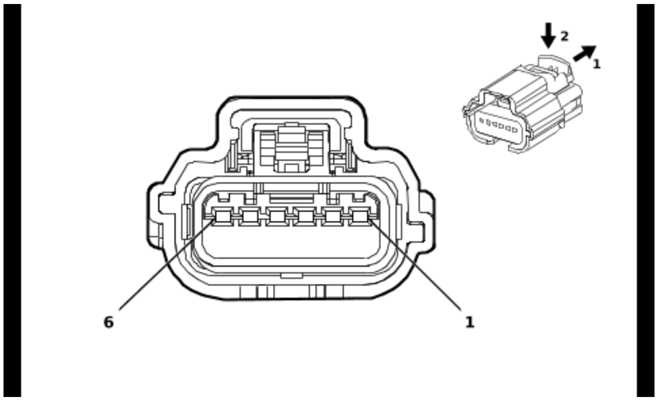
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B20 Brake Fluid Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	333	Brake Fluid Level Signal	I	—
2	0.5	BK	150	Ground	I	—

B22 Brake Pedal Position Sensor



4773396

Connector Part Information

Harness Type: Body
OEM Connector: 35199160
Service Connector: 84683650
Description: 6 <p01>-Way F 64 Series, Sealed(NA)

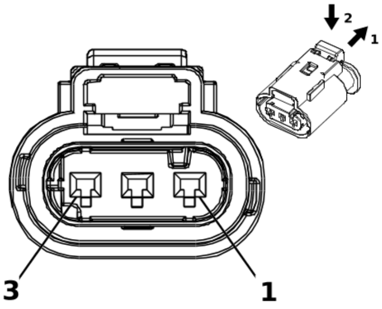
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B22 Brake Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / BN	5360	Brake Apply Sensor Low Reference	I	—
2	0.35	WH	5359	Brake Apply Sensor Control	I	—
3	0.35	BU / YE	5361	Brake Apply Sensor Signal	I	—
4	0.35	WH / GN	5380	Brake Position Sensor Signal	I	—
5	0.35	BK / YE	5382	Brake Position Sensor Low Reference	I	—
6	0.35	WH / RD	5381	Brake Position Sensor 5V Reference	I	—

B23 Camshaft Position Sensor (L82/L84/L87/LV3)



2717069

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 10010341
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

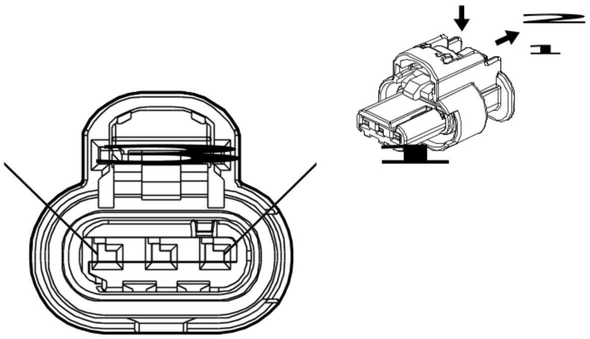
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	Not Available	No Tool Required

B23 Camshaft Position Sensor (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	I	—
2	0.5	GY / GN	5301	Intake Camshaft Position Sensor Low Reference 1	I	—
3	0.5	YE / GY	5275	Intake Camshaft Position Sensor 1	I	—

B23 Camshaft Position Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

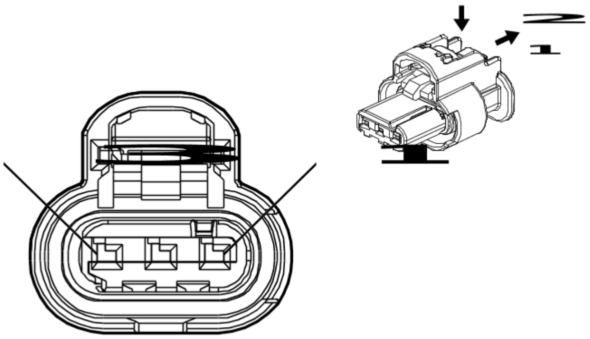
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B23 Camshaft Position Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / YE	5297	Exhaust Camshaft Position Sensor 1 Voltage Reference	I	—
2	0.5	BK / GY	5296	Exhaust Camshaft Position Sensor Low Reference 1	I	—
3	0.5	VT / BK	5273	Exhaust Camshaft Position Sensor 1	I	—

B23E Camshaft Position Sensor - Exhaust (L3B)



Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

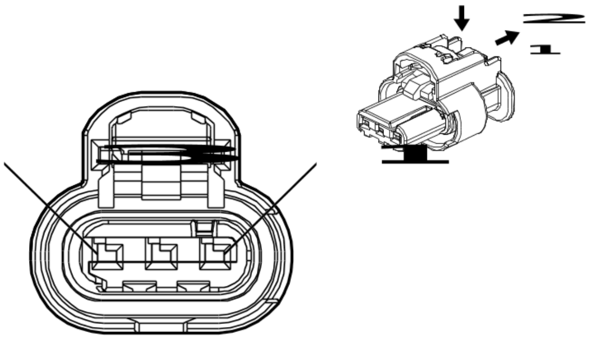
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B23E Camshaft Position Sensor - Exhaust (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / YE	5297	Exhaust Camshaft Position Sensor 1 Voltage Reference	I	—
2	0.5	BK / GY	5296	Exhaust Camshaft Position Sensor Low Reference 1	I	—
3	0.5	VT / BK	5273	Exhaust Camshaft Position Sensor 1	I	—

B23F Camshaft Position Sensor - Intake (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

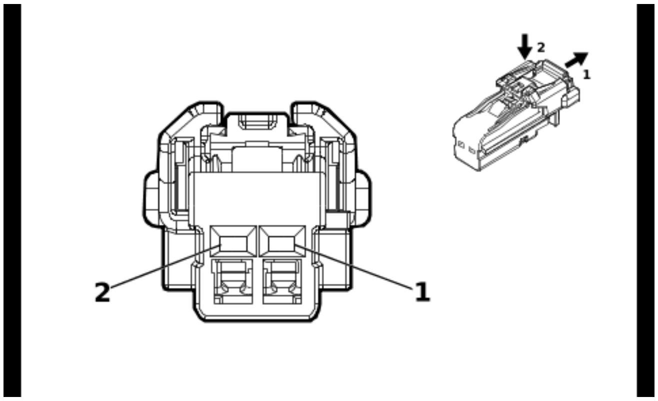
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B23F Camshaft Position Sensor - Intake (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	I	—
2	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	I	—
3	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	I	—

B24LF Mobile Telephone Microphone - Left Front (UE1)



4115691

Connector Part Information

Harness Type: Headliner
OEM Connector: 35311666
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

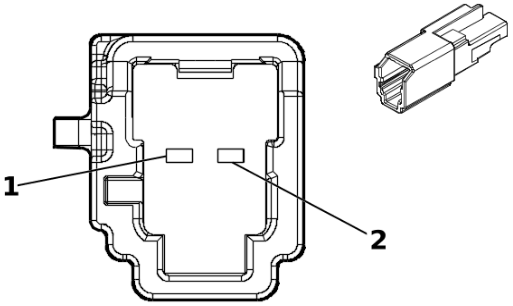
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B24LF Mobile Telephone Microphone - Left Front (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / BN	654	Cellular Telephone Microphone Low Reference	I	—
2	0.35	BU	655	Cellular Telephone Microphone Signal	I	—

B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)



5360948

Connector Part Information

Harness Type: Headliner
OEM Connector: 35264701
Service Connector: 84847259
Description: 2 <p01>-Way M 1.2 MCON Series(GY)

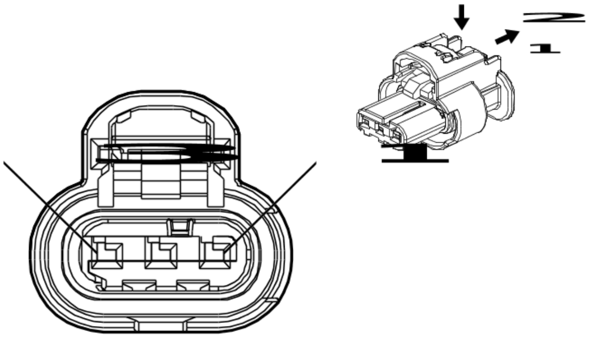
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BK	7044	Microphone [-]	I	—
2	0.35	VT / YE	7043	Microphone [+] Signal	I	—

B26 Crankshaft Position Sensor (L3B)



Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19371206
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

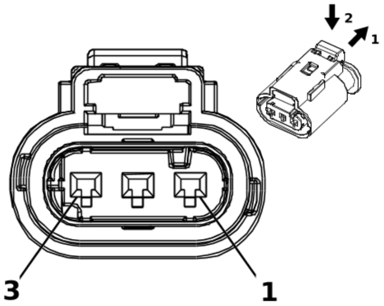
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B26 Crankshaft Position Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—
2	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
3	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—

B26 Crankshaft Position Sensor (L82)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 10010341
Service Connector: 84601390
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

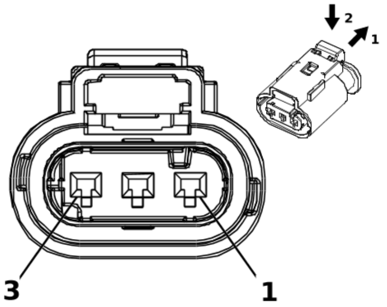
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B26 Crankshaft Position Sensor (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—
2	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
3	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—

B26 Crankshaft Position Sensor (L84/L87)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 10010341
Service Connector: 84601390
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

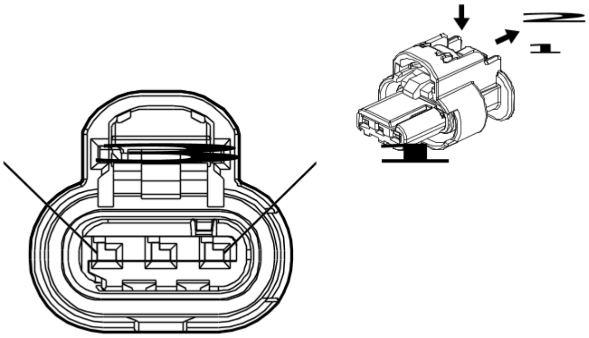
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B26 Crankshaft Position Sensor (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—
2	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
3	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—

B26 Crankshaft Position Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

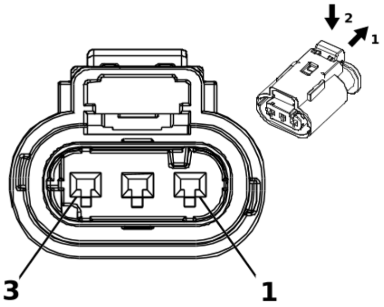
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B26 Crankshaft Position Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—
2	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
3	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—

B26 Crankshaft Position Sensor (LV3)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 10010341
Service Connector: 84601390
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

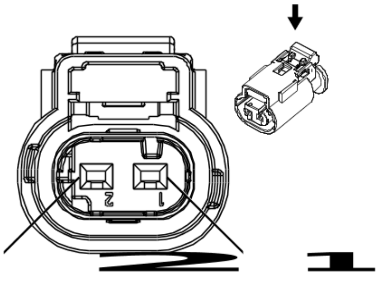
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B26 Crankshaft Position Sensor (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—
2	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
3	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—

B34 Engine Coolant Temperature Sensor (LV3)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 10010337
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

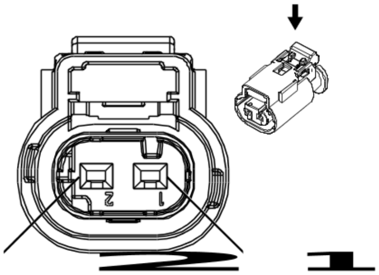
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34 Engine Coolant Temperature Sensor (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	—

B34A Engine Coolant Temperature Sensor 1 (L3B)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

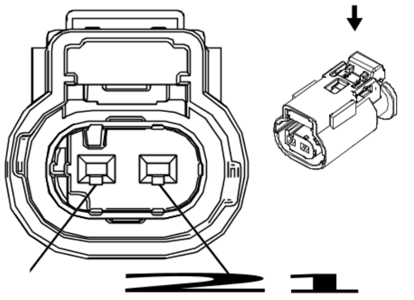
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34A Engine Coolant Temperature Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	2408	Engine Inlet Coolant Temperature Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B34A Engine Coolant Temperature Sensor 1 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 10010339
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

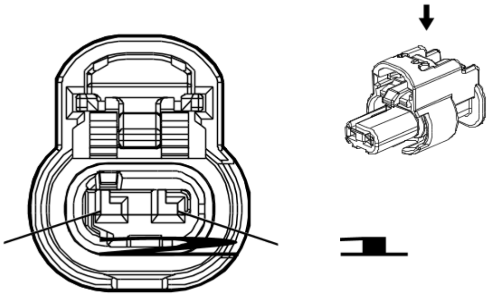
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34A Engine Coolant Temperature Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	2408	Engine Inlet Coolant Temperature Signal	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B34B Engine Coolant Temperature Sensor 2 (L3B)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

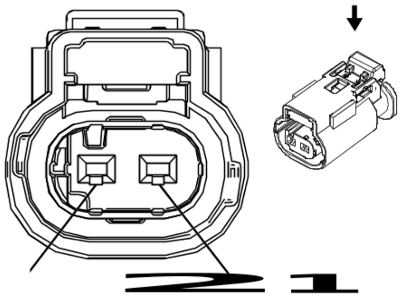
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34B Engine Coolant Temperature Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	I	—
2	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B34B Engine Coolant Temperature Sensor 2 (LM2)



2830969

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor
OEM Connector: 10010339
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

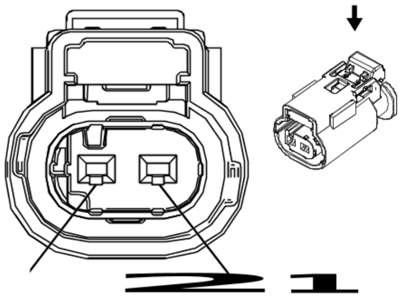
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34B Engine Coolant Temperature Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	I	—
2	0.5	BK / GY	580	Engine Control Sensors Low Reference 2	I	—

B34C Engine Coolant Temperature Sensor 3 (L3B)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

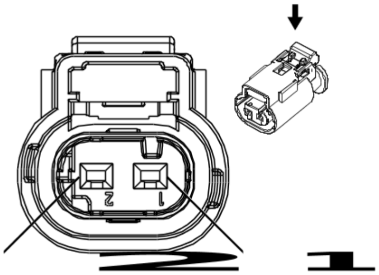
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34C Engine Coolant Temperature Sensor 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GY	4644	Heater Core Inlet Temperature Signal	I	—
2	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B34C Engine Coolant Temperature Sensor 3 (LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 10010337
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

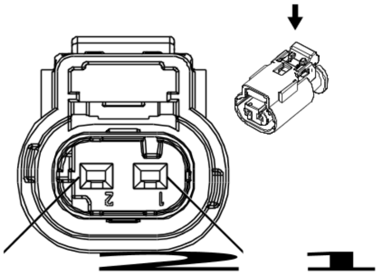
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34C Engine Coolant Temperature Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GY	4644	Heater Core Inlet Temperature Signal	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B34D Engine Coolant Temperature Sensor 4 (L3B)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

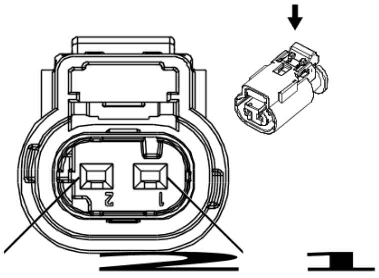
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34D Engine Coolant Temperature Sensor 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	4645	Heater Core Outlet Temperature Signal	I	—
2	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B34D Engine Coolant Temperature Sensor 4 (LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 10010337
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

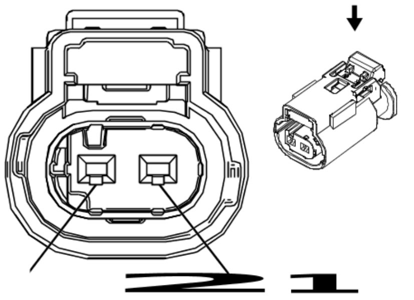
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34D Engine Coolant Temperature Sensor 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	4645	Heater Core Outlet Temperature Signal	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B34E Engine Coolant Temperature Sensor 5 (L3B)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

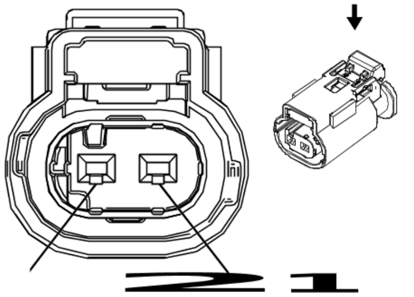
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34E Engine Coolant Temperature Sensor 5 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	906	—	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B34E Engine Coolant Temperature Sensor 5 (LM2)



2830969

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor
OEM Connector: 10010339
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

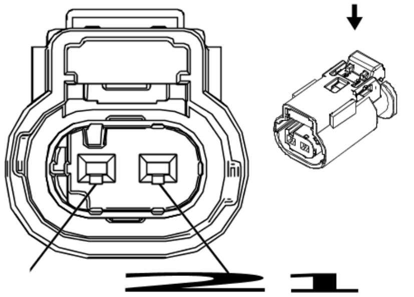
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34E Engine Coolant Temperature Sensor 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / VT	2404	Engine Block Coolant Temperature Signal	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B34F Engine Coolant Temperature Sensor 6 (L3B)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

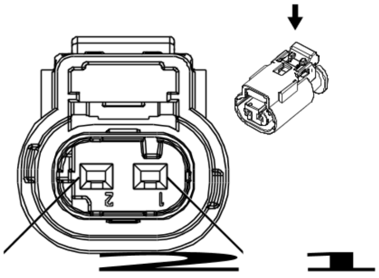
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34F Engine Coolant Temperature Sensor 6 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / VT	2404	Engine Block Coolant Temperature Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B34J Engine Coolant Temperature Sensor 7 (LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 10010337
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

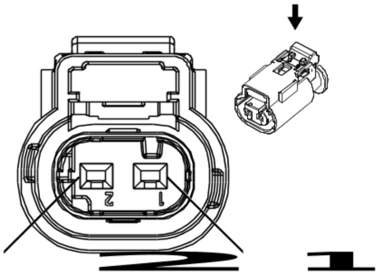
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B34J Engine Coolant Temperature Sensor 7 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	626	Engine Control Vehicle Sensors Low Reference 1	I	—
2	0.5	BU / BK	1422	Engine Water Charge Air Coolant Temperature Signal	I	—

B35 Engine Oil Level Switch (L82/L84/L87/LV3)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 10010337
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

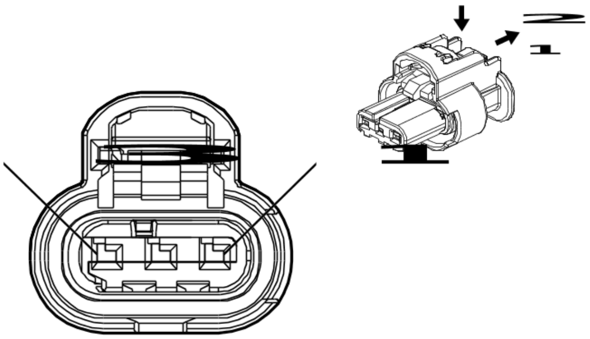
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B35 Engine Oil Level Switch (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / WH	451	Signal Ground	I	—
2	0.5	BN / GN	1174	Oil Level Switch Signal	I	—

B36 Engine Oil Temperature Sensor (L3B)



4994602

Connector Part Information

Harness Type: Engine
OEM Connector: 33358809
Service Connector: 19371199
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

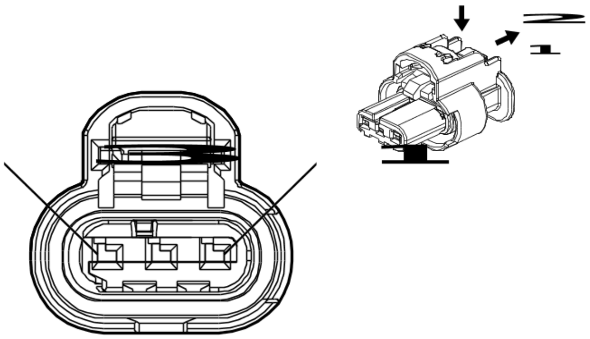
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B36 Engine Oil Temperature Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
2	0.5	BN / BU	357	Oil Temperature Sensor Signal	I	—
3	0.5	VT	7485	Engine Oil Temperature Sensor 2 Signal	I	—

B36 Engine Oil Temperature Sensor (LM2)



4994602

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-3
Service Connector: 19371199
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

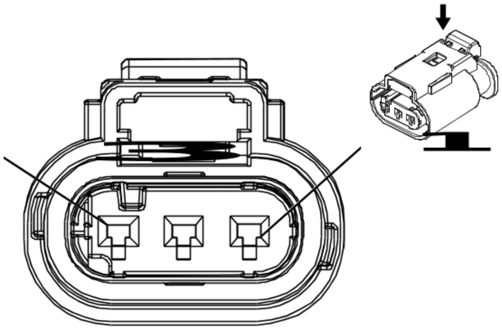
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B36 Engine Oil Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
2	0.5	BN / BU	357	Oil Temperature Sensor Signal	I	—
3	0.5	VT	7485	Engine Oil Temperature Sensor 2 Signal	I	—

B37B Engine Oil Pressure Sensor (L3B)



3240107

Connector Part Information

Harness Type: Engine
OEM Connector: 13889776
Service Connector: 19301717
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

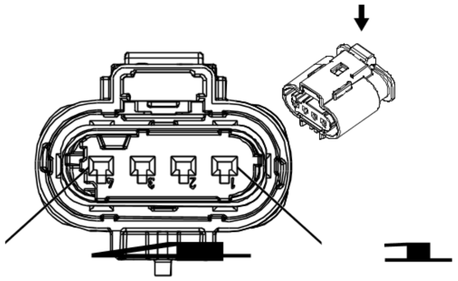
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B37B Engine Oil Pressure Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
2	0.75	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.75	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—

B37B Engine Oil Pressure Sensor (L82)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 10010346
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

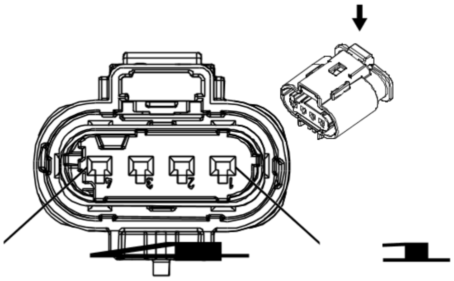
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B37B Engine Oil Pressure Sensor (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.5	BN / BU	357	Oil Temperature Sensor Signal	I	—

B37B Engine Oil Pressure Sensor (L84/L87)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 10010346
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

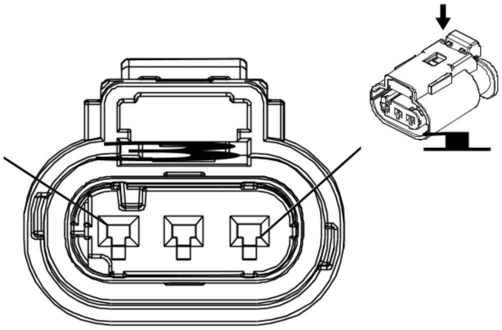
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B37B Engine Oil Pressure Sensor (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.5	BN / BU	357	Oil Temperature Sensor Signal	I	—

B37B Engine Oil Pressure Sensor (LM2)



3240107

Connector Part Information

Harness Type: Engine
OEM Connector: 10010344
Service Connector: 19301717
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

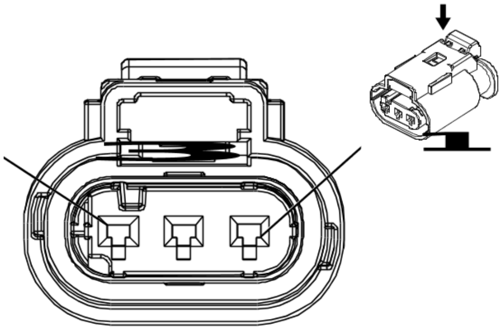
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B37B Engine Oil Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—

B37B Engine Oil Pressure Sensor (LV3)



3240107

Connector Part Information

Harness Type: Engine
OEM Connector: 10010344
Service Connector: 19301717
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

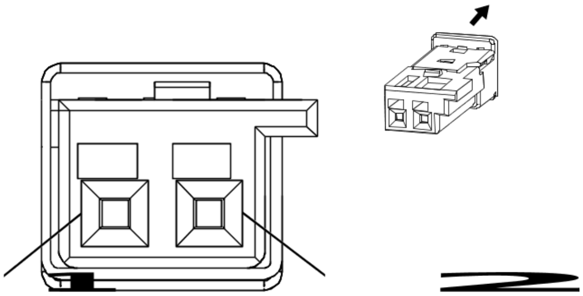
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B37B Engine Oil Pressure Sensor (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B39 A/C Evaporator Temperature Sensor



2780265

Connector Part Information

Harness Type: HVAC
OEM Connector: 13535799
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 Micro-Quadlock Series(NA)

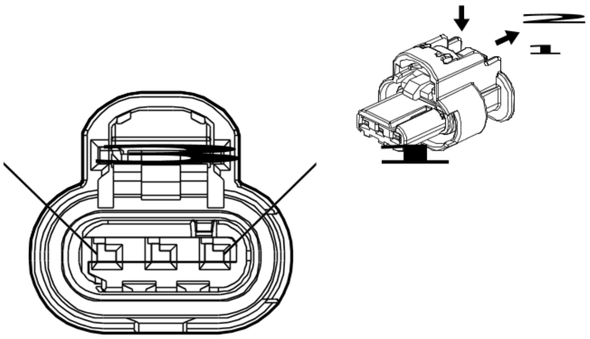
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B39 A/C Evaporator Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	6137	A/C Evaporator Temperature Sensor Signal	I	—
2	—	BK / YE	1791	Air Temperature Door Low Reference	I	—

B47 Fuel Pressure Sensor (L3B/L82/L84/L87/LV3)



4581126

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

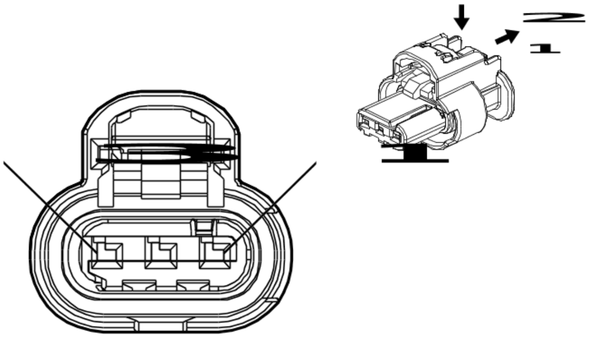
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B47 Fuel Pressure Sensor (L3B/L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
2	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
3	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	I	—

B47 Fuel Pressure Sensor (LM2)



4581126

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

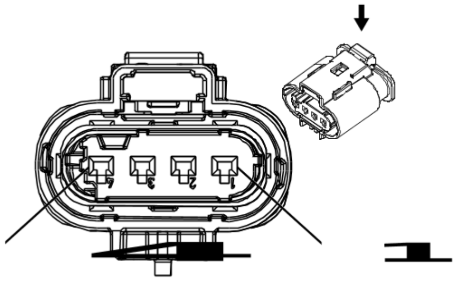
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B47 Fuel Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
2	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
3	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	I	—

B47B Fuel Rail Pressure Sensor (LM2)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 10010346
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

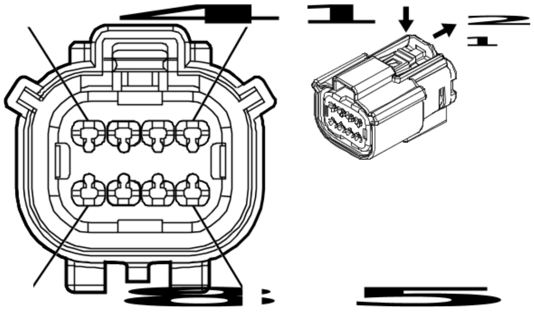
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B47B Fuel Rail Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	2917	Fuel Rail Pressure Sensor 5V Reference	I	—
2	0.5	BN / YE	2161	Fuel Rail Pressure Sensor 2 Signal	I	—
3	0.5	BK / GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—
4	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—

B52A Heated Oxygen Sensor 1 (L3B)



4846403

Connector Part Information

Harness Type: Engine
OEM Connector: 35037828
Service Connector: 19369368
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

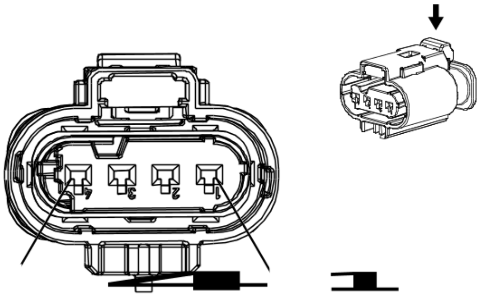
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B52A Heated Oxygen Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	6934	HO2S Ground	I	—
2	0.75	YE / GY	6936	HO2S Signal	I	—
3	0.75	BN / WH	6933	HO2S Pump Current Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.75	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
7	0.75	GN	6935	HO2S Pump Current Trim Signal	I	—
8	—	—	—	Not Occupied	—	—

B52B Heated Oxygen Sensor 2 (L3B)



4036496

Connector Part Information

Harness Type: Engine
OEM Connector: 15532689
Service Connector: 19330904
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

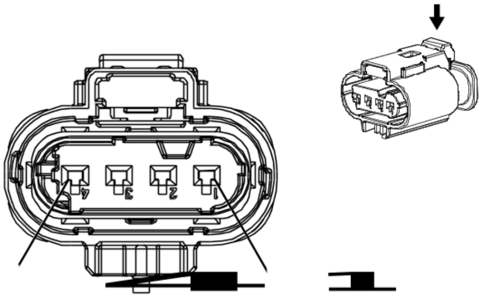
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B52B Heated Oxygen Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
2	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.75	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
4	0.75	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3)



4381050

Connector Part Information

Harness Type: Engine
OEM Connector: 10021267
Service Connector: 19354075
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

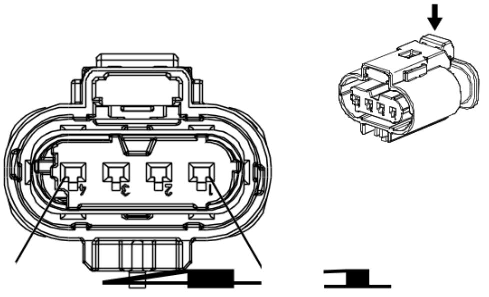
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
2	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
3	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	I	—
4	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	I	—

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87/LV3)



4036370

Connector Part Information

Harness Type: Engine
OEM Connector: 10021266
Service Connector: 19330920
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(GY)

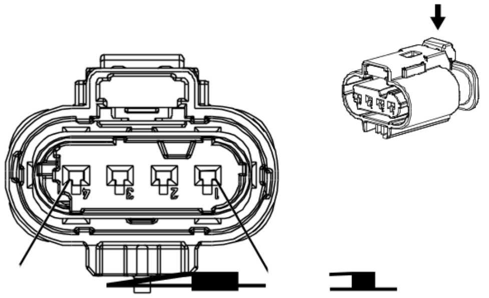
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
2	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
4	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3)



4381050

Connector Part Information

Harness Type: Engine
OEM Connector: 10021267
Service Connector: 19354075
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

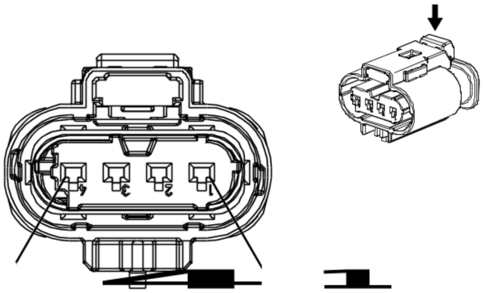
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	I	—
2	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
3	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	I	—
4	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	I	—

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87/LV3)



4036370

Connector Part Information

Harness Type: Engine
OEM Connector: 10021266
Service Connector: 19330920
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(GY)

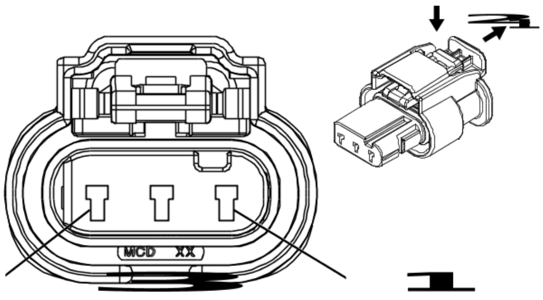
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	I	—
2	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	I	—
4	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	I	—

B55 Engine Hood Switch



4421568

Connector Part Information

Harness Type: Body
OEM Connector: 33320864
Service Connector: 19368220
Description: 3 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

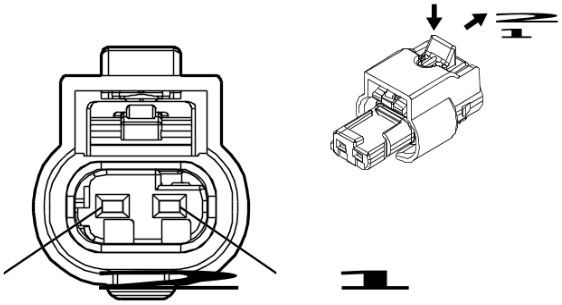
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B55 Engine Hood Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	4063	Hood Status A Signal	I	—
2	0.35	BN / GN	4064	Hood Status B Signal	I	—
3	0.35	BK	150	Ground	I	—

B59L Front Impact Sensor - Left



4975834

Connector Part Information

Harness Type: Body
OEM Connector: 33299485
Service Connector: 19371203
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

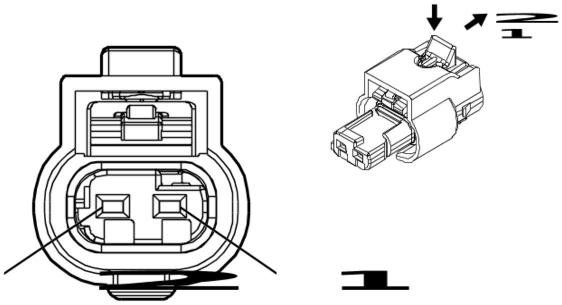
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B59L Front Impact Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / YE	354	Left Front Impact Discriminating Sensor Signal	I	—
2	0.5	BK / OG	5045	Left Front Impact Discriminating Sensor Low Reference	I	—

B59R Front Impact Sensor - Right



4975834

Connector Part Information

Harness Type: Body
OEM Connector: 33299485
Service Connector: 19371203
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

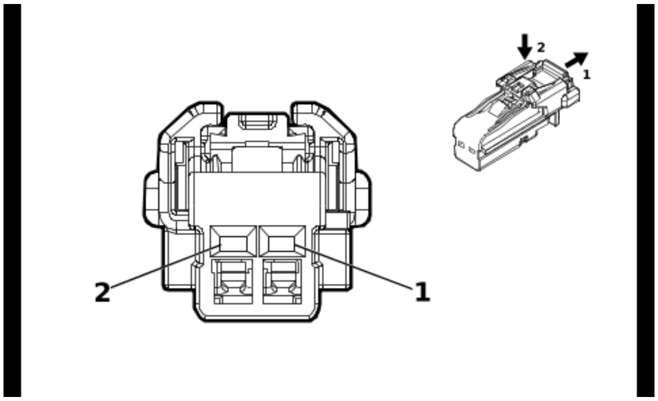
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B59R Front Impact Sensor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	1409	Right Front Impact Discriminating Sensor Signal	I	—
2	0.5	BK / OG	5600	Right Front Impact Discriminating Sensor Low Reference	I	—

B61P Seat Belt Tension Sensor - Passenger



4115691

Connector Part Information

Harness Type: Body
OEM Connector: 35026312
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 Series(BK)

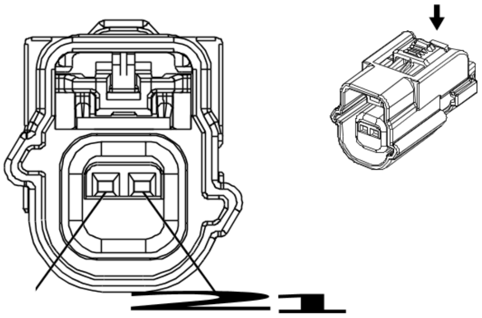
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B61P Seat Belt Tension Sensor - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / OG	3946	Passenger Automatic Locking Retractor Switch Low Reference	I	—
2	0.5	OG / BN	3947	Passenger Automatic Locking Retractor Switch Signal	I	—

B63LF Side Impact Sensor - Left Front



3931604

Connector Part Information

Harness Type: Driver Door
OEM Connector: 33503704
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 Series, Sealed(BN)

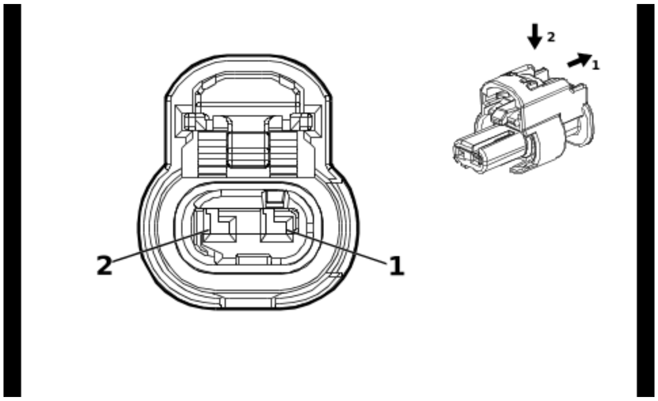
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B63LF Side Impact Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	OG / GN	2132	Left Front Side Impact Sensor Signal	I	—
2	0.75	BK / OG	6628	Left Front Side Impact Sensor Low Reference	I	—

B63LR Side Impact Sensor - Left Rear



4649903

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

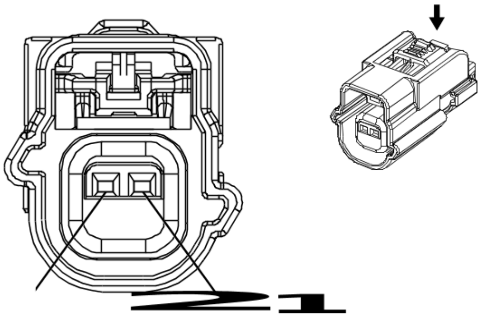
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B63LR Side Impact Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BU	6622	Left Rear Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6623	Left Rear Side Impact Sensor Low Reference	I	—

B63RF Side Impact Sensor - Right Front



3931604

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33503704
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 Series, Sealed(BN)

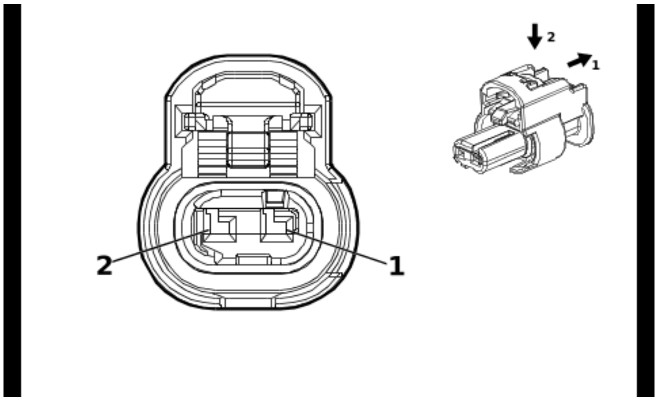
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B63RF Side Impact Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / OG	2134	Right Front Side Impact Sensor Signal	I	—
2	0.75	BK / OG	6629	Right Front Side Impact Sensor Low Reference	I	—

B63RR Side Impact Sensor - Right Rear



4649903

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

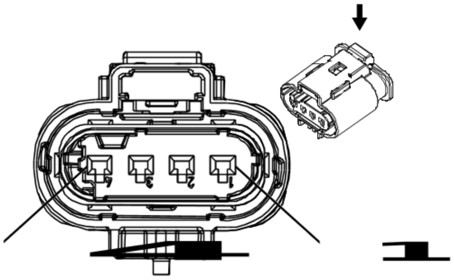
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B63RR Side Impact Sensor - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / VT	6626	Right Rear Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6627	Right Rear Side Impact Sensor Low Reference	I	—

B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

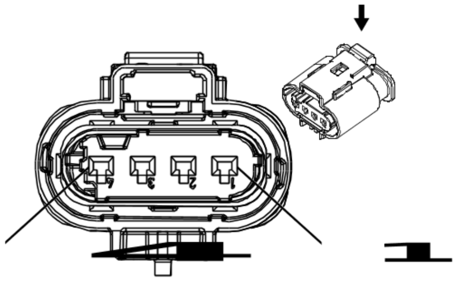
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	7348	Intake Air Temperature Sensor 2 Signal	I	—
2	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
3	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
4	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 10010346
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

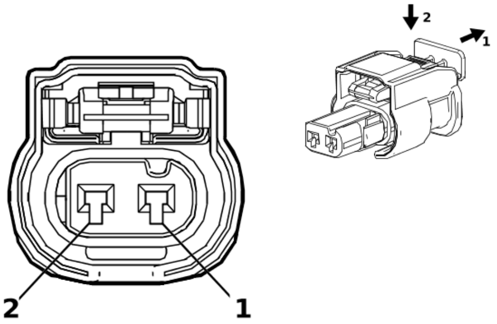
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	6118	Intake Manifold Air Temperature Sensor Signal	I	—
2	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
4	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B68A Knock Sensor 1 (L3B)



3960139

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

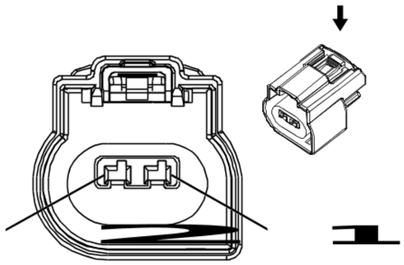
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B68A Knock Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / GY	496	Knock Sensor 1 Signal	I	—
2	0.5	BK / YE	1716	Knock Sensor Low Reference 1	I	—

B68A Knock Sensor 1 (L82/L84/L87/LV3)



2717073

Connector Part Information

Harness Type: Engine
OEM Connector: 34752-0204
Service Connector: 19301207
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

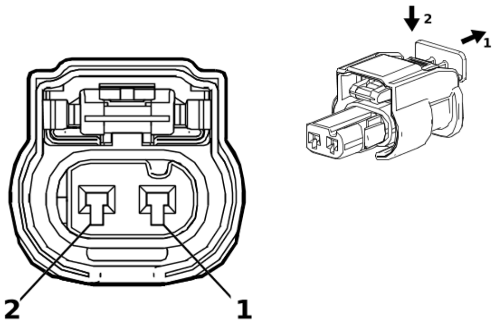
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B68A Knock Sensor 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.75	BK / YE VT / GY	1716 496	Knock Sensor Low Reference 1 Knock Sensor 1 Signal	I I	L82/ L84/ L87 LV3
2	0.75 0.75	VT / GY BK / YE	496 1716	Knock Sensor 1 Signal Knock Sensor Low Reference 1	I I	L82/ L84/ L87 LV3

B68B Knock Sensor 2 (L3B)



3960139

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

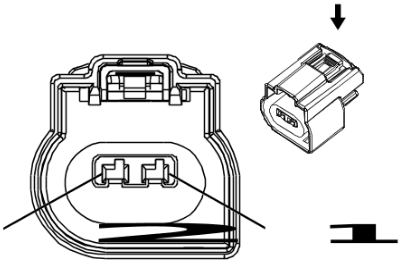
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B68B Knock Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / GY	1876	Knock Sensor 2 Signal	I	—
2	0.5	BK / GY	2303	Knock Sensor Low Reference 2	I	—

B68B Knock Sensor 2 (L82/L84/L87/LV3)



2717073

Connector Part Information

Harness Type: Engine
OEM Connector: 34752-0204
Service Connector: 19301207
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

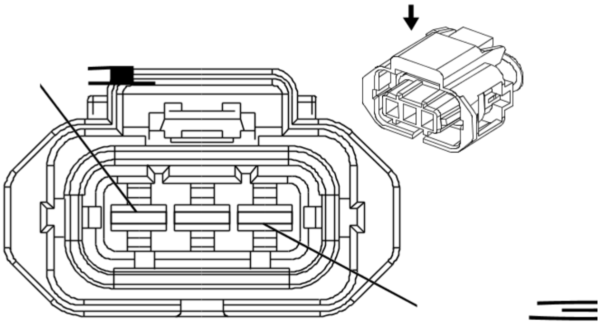
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B68B Knock Sensor 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.75	BK / GY WH / GY	2303 1876	Knock Sensor Low Reference 2 Knock Sensor 2 Signal	I I	L82/ L84/ L87 LV3
2	0.75 0.75	WH / GY BK / GY	1876 2303	Knock Sensor 2 Signal Knock Sensor Low Reference 2	I I	L82/ L84/ L87 LV3

B74 Manifold Absolute Pressure Sensor (L82/L84/L87/LV3)



1914850

Connector Part Information

Harness Type: Engine

OEM Connector: 15397338

Service Connector: 13585845

Description: 3 <p01>-Way F 2.8 Junior Power Timer Series, Sealed(BK)

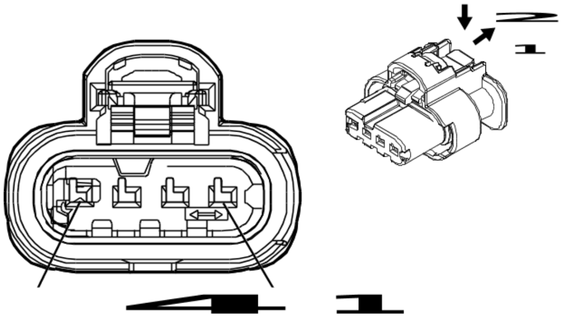
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

B74 Manifold Absolute Pressure Sensor (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
2	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
3	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B75C Multifunction Intake Air Sensor



4934614

Connector Part Information

Harness Type: Engine
OEM Connector: 33367416
Service Connector: 19371196
Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

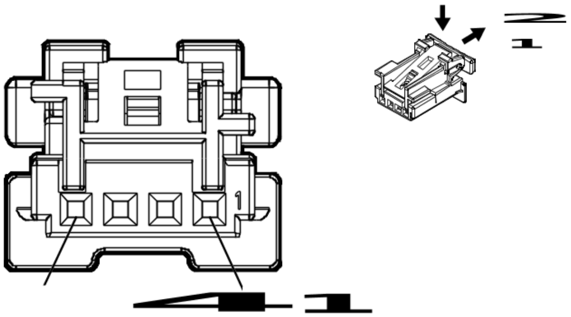
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B75C Multifunction Intake Air Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	GN / WH	492	Mass Air Flow Sensor Signal	I	—
3	0.5	GN / WH	4622	Engine Control Module LIN Bus 2	I	—
4	1	BK / WH	451	Signal Ground	I	—

B80 Park Brake Switch



4997407

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2294218-1
Service Connector: 19371192
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

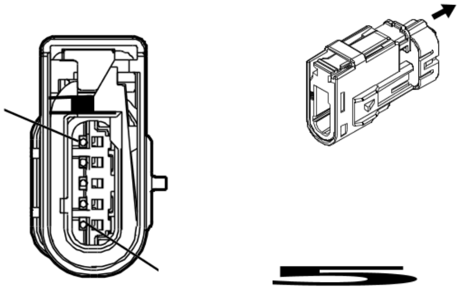
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B80 Park Brake Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / GN	5140	Battery Positive Voltage	I	—
2	0.35	GN / YE	2731	Electronic Brake Control Module LIN Bus 1	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK	1850	Ground	I	—

B87 Rearview Camera (5N5)



4808321

Connector Part Information

Harness Type: Rearview Camera
OEM Connector: 35028910
Service Connector: Service by Harness - See Part Catalog
Description: 5 <p01>-Way M 1.2 Series, Sealed(GY)

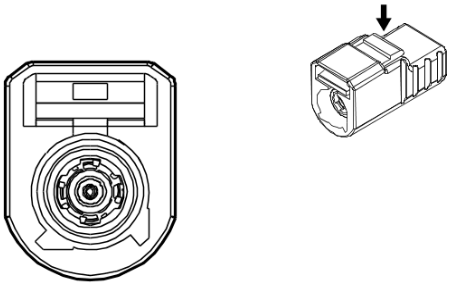
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B87 Rearview Camera (5N5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / YE	6972	Rearview Camera Signal [+]	I	—
2	0.5	WH / BU	6973	Rearview Camera Signal [-]	I	—
3	0.35	BU	6974	Rearview Camera Low Reference	I	—
4	0.5	BK / WH	1751	Signal Ground	I	—
5	0.5	VT / GN	1739	Run/Crank Ignition 1 Voltage	I	—

B87 Rearview Camera (UVB)



4883511

Connector Part Information

Harness Type: Endgate COAX
OEM Connector: 13514003
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(OG)

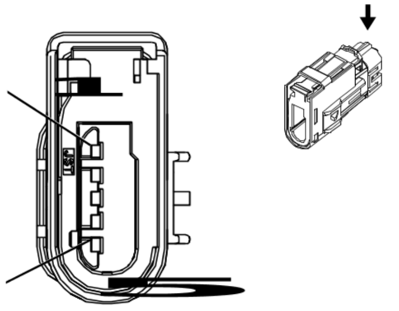
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B87 Rearview Camera (UVB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Coaxial Camera Signal	I	—

B87 Rearview Camera (UVC)



3277922

Connector Part Information

Harness Type: Endgate
OEM Connector: 13934096
Service Connector: Service by Harness - See Part Catalog
Description: 5 <p01>-Way M 1.2 Series, Sealed(L-GY)

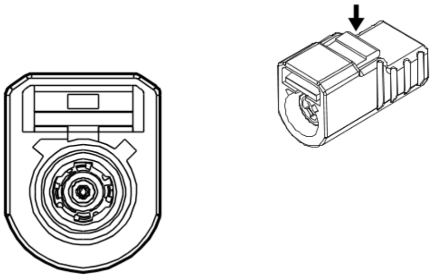
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

B87 Rearview Camera (UVC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / YE	6972	Rearview Camera Signal [+]	I	—
2	0.5	WH / BU	6973	Rearview Camera Signal [-]	I	—
3	0.35	BU	6974	Rearview Camera Low Reference	II	—
4	0.5	BK / WH	1751	Signal Ground	I	—
5	0.5	VT / GN	1739	Run/Crank Ignition 1 Voltage	I	—

B87 Rearview Camera (UVI/UVS)



4883521

Connector Part Information

Harness Type: Endgate COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

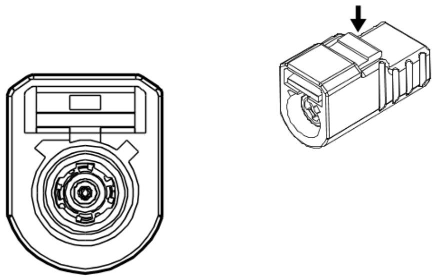
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B87 Rearview Camera (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Camera Signal	I	—

B87CA Rearview Driver Information Camera - Cargo Area (UVN/UVS)



4883521

Connector Part Information

Harness Type: Center High Mounted Stop Lamp COAX
OEM Connector: 13529782
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

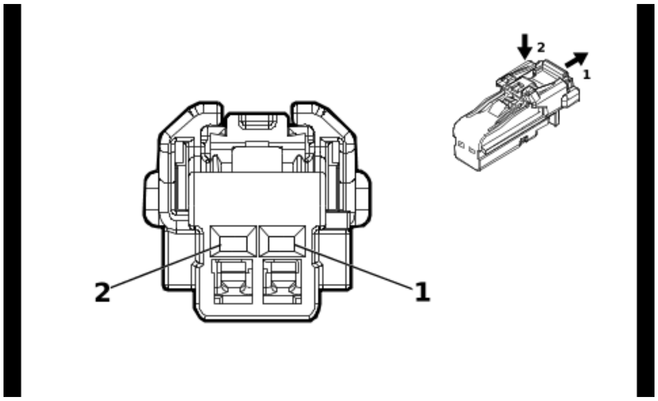
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B87CA Rearview Driver Information Camera - Cargo Area (UVN/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Cargo Bed Rear Vision Camera Coaxial Video Signal	I	—

B88D Seat Belt Switch - Driver



4115691

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

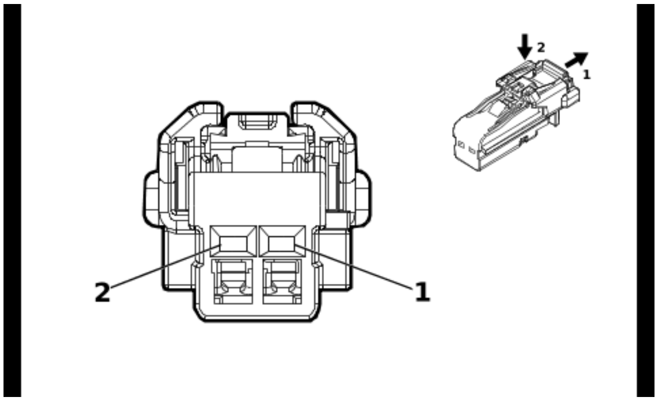
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B88D Seat Belt Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.35	OG / BN	238	Driver Seat Belt Switch Signal	I	—

B88P Seat Belt Switch - Passenger



4115691

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

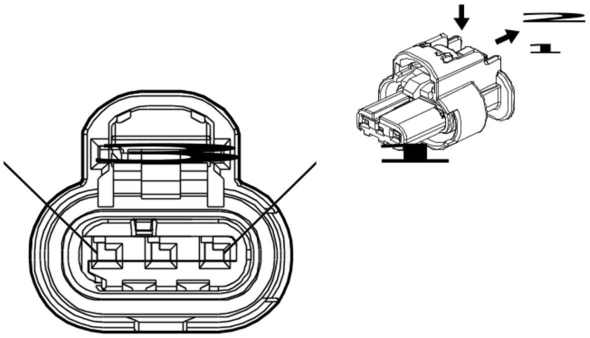
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B88P Seat Belt Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1361	Passenger Seat Belt Switch Low Reference	I	—
2	0.35	OG / VT	1362	Passenger Seat Belt Switch Signal	I	—

B96 Cylinder Head Temperature Sensor (LM2)



4994602

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-3
Service Connector: 19371199
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

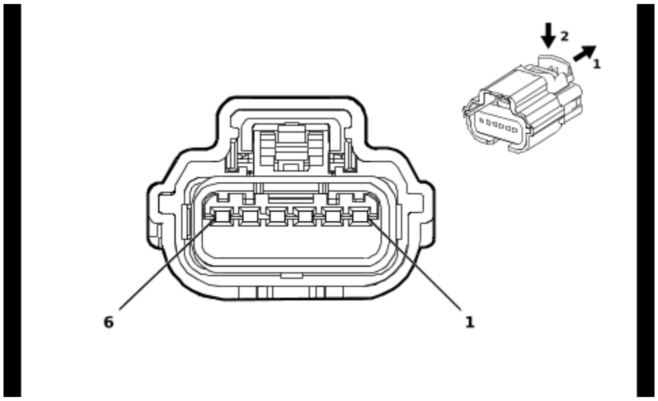
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B96 Cylinder Head Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
2	0.5	GN / YE	37	Engine Block Temperature Sensor Signal	I	—
3	0.5	BN / YE	1372	Engine Metal Temperature Sensor Signal 2	I	—

B107 Accelerator Pedal Position Sensor



5157678

Connector Part Information

Harness Type: Body
OEM Connector: 35199156
Service Connector: 84773558
Description: 6 <p01>-Way F 64 Series, Sealed(BK)

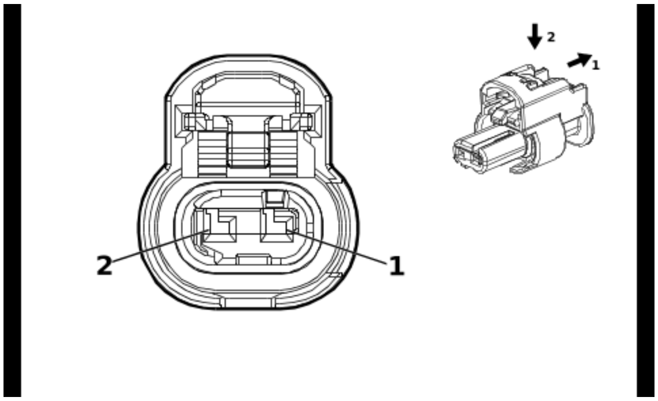
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B107 Accelerator Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
2	0.35	YE / WH	1161	Accelerator Pedal Position Signal 1	I	—
3	0.35	BK / BU	1271	Accelerator Pedal Position Low Reference 1	I	—
4	0.35	BK / VT	1272	Accelerator Pedal Position Low Reference 2	I	—
5	0.35	GN / WH	1162	Accelerator Pedal Position Signal 2	I	—
6	0.35	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	I	—

B110 Battery Sensor Module X1 (KL9)



4649903

Connector Part Information

Harness Type: Body
OEM Connector: 33327048
Service Connector: 19366858
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

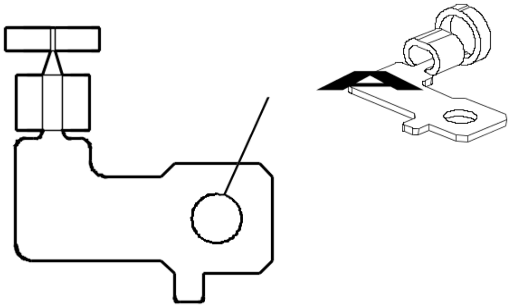
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B110 Battery Sensor Module X1 (KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
2	0.75	RD / YE	2340	Battery Positive Voltage	I	—

B110 Battery Sensor Module X2 (KL9)



4935266

Connector Part Information

Harness Type: Battery
OEM Connector: 13516387
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

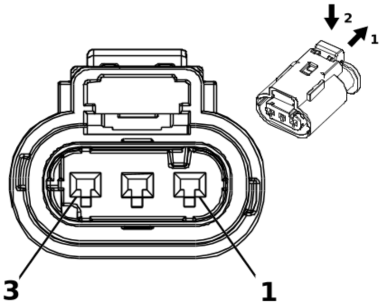
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B110 Battery Sensor Module X2 (KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	2350	Ground	I	—

B111 Turbocharger Boost Sensor (L3B)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 84601390
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

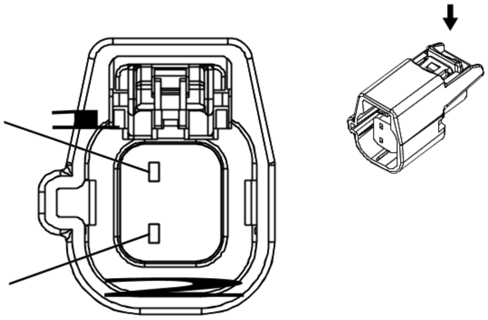
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B111 Turbocharger Boost Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.5	YE	2596	Turbocharger Inlet Absolute Pressure Sensor Signal	I	—

B118B Windshield Washer Fluid Level Switch



3958652

Connector Part Information

Harness Type: Body
OEM Connector: 33113086
Service Connector: 13593220
Description: 2 <p01>-Way F 1.5 Series, Sealed(L-GY)

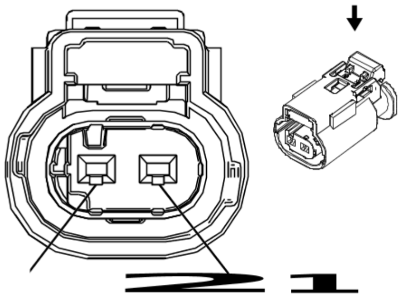
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B118B Windshield Washer Fluid Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	185	Low Washer Fluid Indicator Control	I	—
2	0.35	BK	150	Ground	I	—

B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 10010339
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

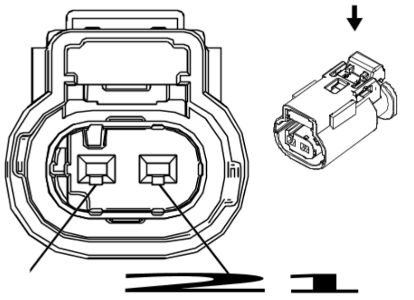
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GN	3236	Exhaust Gas Recirculation Temperature Sensor 2 Signal	I	—
2	0.5	BK / YE	6275	Exhaust Gas Recirculation Temperature Sensor 2 Low Reference	I	—

B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 10010339
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

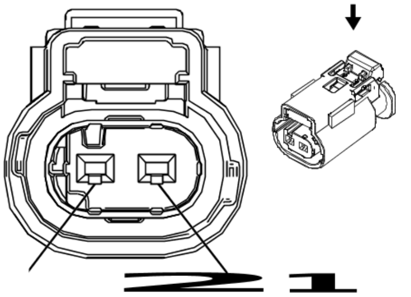
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / GY	3234	Exhaust Gas Recirculation Temperature Sensor 3 Signal	I	—
2	0.5	BK / GN	3235	Exhaust Gas Recirculation Temperature Sensor 3 Low Reference	I	—

B131A Exhaust Temperature Sensor 1 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 10010339
Service Connector: 13587321
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(D-GY)

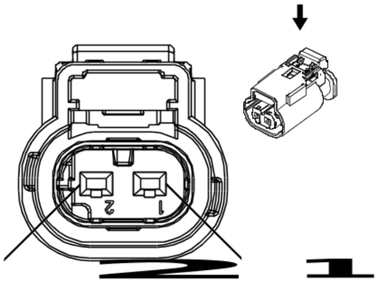
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B131A Exhaust Temperature Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / WH	5277	Exhaust Gas Temperature Sensor 1 Signal	I	—
2	0.5	BK / BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—

B131B Exhaust Temperature Sensor 2 (LM2)



2717037

Connector Part Information

Harness Type: Engine
OEM Connector: 10010338
Service Connector: 13587325
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(L-GY)

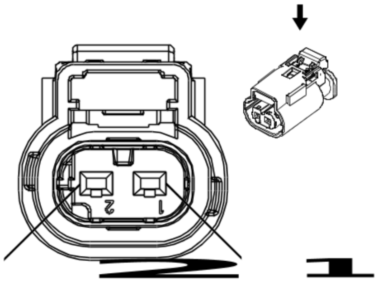
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B131B Exhaust Temperature Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / GN	5377	Exhaust Gas Temperature Sensor 2 Signal	I	—
2	0.5	BK / BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—

B131C Exhaust Temperature Sensor 3 (LM2)



2717037

Connector Part Information

Harness Type: Engine
OEM Connector: 10010338
Service Connector: 13587325
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(L-GY)

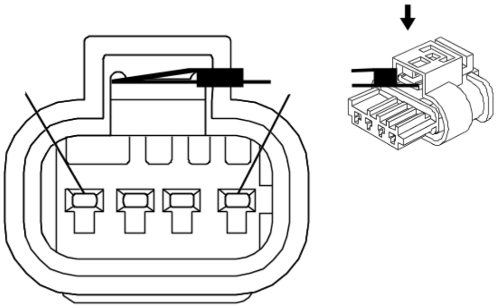
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B131C Exhaust Temperature Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / GN	5378	Exhaust Gas Temperature Sensor 3 Signal	I	—
2	0.5	BK / GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	I	—

B136 Exhaust Particulate Matter Sensor (LM2)



2487928

Connector Part Information

Harness Type: Chassis
OEM Connector: 805-122-541
Service Connector: 13581092
Description: 4 <p01>-Way F 1.2 Series, Sealed(BK)

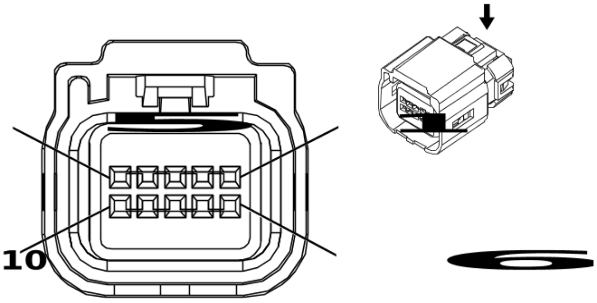
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B136 Exhaust Particulate Matter Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK / WH	1651	Signal Ground	I	—
2	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
3	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
4	0.75	VT / BU	3674	NOx Sensor 1 Control	I	—

B137B Power Steering Shaft Torque/Position Sensor



3608468

Connector Part Information

Harness Type: Power Steering Shaft Torque/Position Sensor
OEM Connector: 38248369
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 Kaizen Series, Sealed(BN)

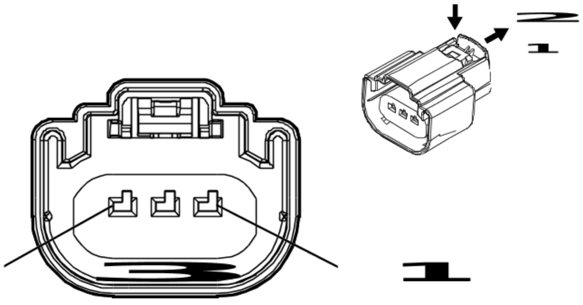
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B137B Power Steering Shaft Torque/Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	8367	Handwheel Channel A Torque Pressure Sensor 1 SENT Signal	I	—
2	0.5	RD	8366	Handwheel Channel A High Reference	I	—
3	0.5	BK	8370	Handwheel Channel A Low Reference	I	—
4	0.5	WH / RD	8371	Handwheel Channel B High Reference	I	—
5	0.5	WH / BU	8372	Handwheel Channel B Torque Pressure Sensor 1 SENT Signal	I	—
6	0.5	VT	8368	Handwheel Channel A Torque Pressure Sensor 2 SENT Signal	I	—
7	0.5	OG	8369	Handwheel Channel A Angle Position Sensor SENT Signal	I	—
8	0.5	GY	8375	Handwheel Channel B Low Reference	I	—
9	0.5	YE	8374	Handwheel Channel B Angle Position Sensor SENT Signal	I	—
10	0.5	GN	8373	Handwheel Channel B Torque Pressure Sensor 2 SENT Signal	I	—

B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)



4569745

Connector Part Information

Harness Type: Engine
OEM Connector: 33343869
Service Connector: 19179750
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(BK)

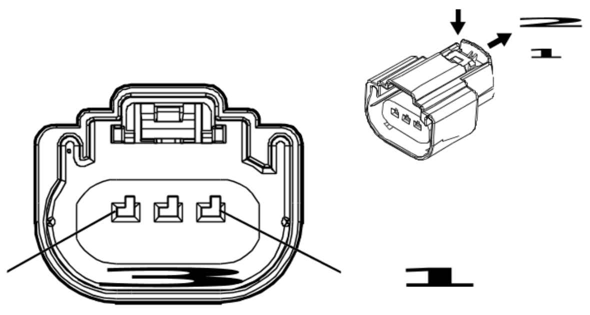
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	7477	Gear Position Sensor 5V Reference	I	—
2	0.5	WH / GN	7479	Rotary Position Sensor Signal	I	—
3	0.5	YE / BK	7478	Gear Position Sensor Low Reference	I	—

B150 Fuel Tank Pressure Sensor (-LM2)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 160073-3106
Service Connector: 84569854
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(GY)

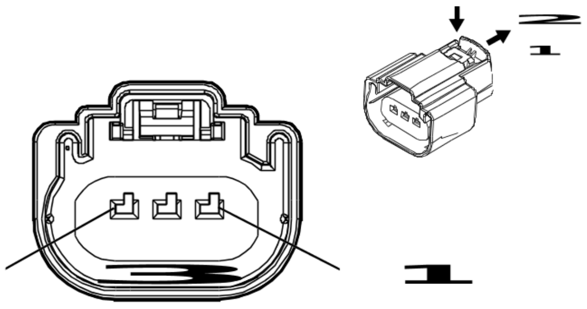
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B150 Fuel Tank Pressure Sensor (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / WH	890	Fuel Tank Pressure Sensor Signal	I	—
2	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
3	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—

B152LF Suspension Position Sensor - Left Front (Z45)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 160073-3106
Service Connector: 84569854
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(GY)

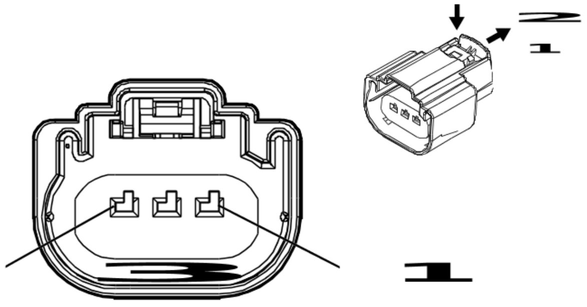
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B152LF Suspension Position Sensor - Left Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	1205	Left Front Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / BU	1206	Left Front Suspension Position Sensor Low Reference	I	—
3	0.5	BN / WH	1207	Left Front Suspension Position Sensor Signal	I	—

B152R Suspension Position Sensor - Rear (Z45)



Connector Part Information

Harness Type: Chassis
OEM Connector: 160073-3106
Service Connector: 84569854
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(GY)

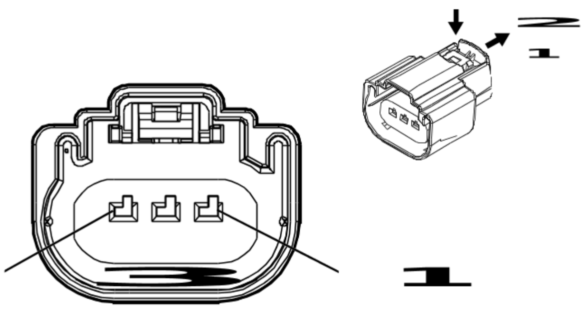
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B152R Suspension Position Sensor - Rear (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / RD	1208	Left Rear Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / GN	1209	Left Rear Suspension Position Sensor Low Reference	I	—
3	0.5	GN / WH	1210	Left Rear Suspension Position Sensor Signal	I	—

B152RF Suspension Position Sensor - Right Front (Z45)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 160073-3106
Service Connector: 84569854
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(GY)

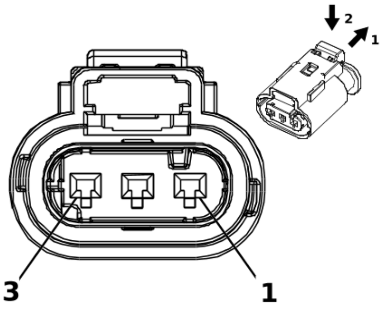
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B152RF Suspension Position Sensor - Right Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	1211	Right Front Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / GY	1212	Right Front Suspension Position Sensor Low Reference	I	—
3	1	YE / WH	1213	Right Front Suspension Position Sensor Signal	I	—

B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 10010341
Service Connector: 84601390
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

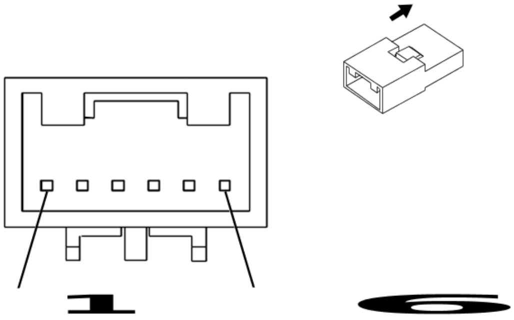
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BU	6053	Exhaust Pressure Sensor 1 Signal	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B160 Windshield Temperature and Inside Moisture Sensor (ASV)



2839920

Connector Part Information

Harness Type: Headliner
OEM Connector: 13770074
Service Connector: 19299681
Description: 6 <p01>-Way M 0.64 Kaizen Series(BK)

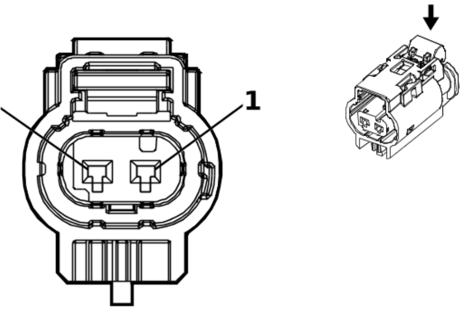
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-65B (LT BU)	No Tool Required

B160 Windshield Temperature and Inside Moisture Sensor (ASV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / RD	597	5V Reference	I	—
2	0.35	GY / BU	7564	Humidity Sensor Signal 2	I	—
3	0.35	BK / BU	7566	Windshield Temperature and Inside Moisture Sensor Low Reference	I	—
4	0.35	GY / GN	7565	Windshield Temperature Sensor Signal	I	—
5	0.35	YE / BU	3197	Intake Air Humidity and Temperature Sensor Signal	I	—
6	—	—	—	Not Occupied	—	—

B172LF Brake Pad Wear Sensor - Left Front (J61)



Connector Part Information

Harness Type: Chassis
OEM Connector: 10094234
Service Connector: 84727362
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

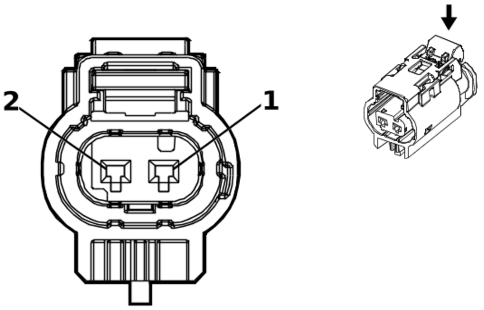
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B172LF Brake Pad Wear Sensor - Left Front (J61)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1612	Left Front Brake Pad Wear Sensor 3 Signal	I	—
2	0.75	BK / WH	1751	Signal Ground	I	—

B172LR Brake Pad Wear Sensor - Left Rear (J61)



3747581

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 13583195
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

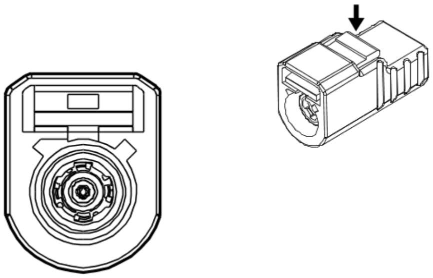
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B172LR Brake Pad Wear Sensor - Left Rear (J61)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / YE	1616	Rear Brake Pad Wear Sensor Signal	I	—
2	0.75	BK / WH	1751	Signal Ground	I	—

B174G Frontview Camera - Grille (UVS)



4883521

Connector Part Information

Harness Type: Grille Frontview Camera COAX
OEM Connector: 35187032
Service Connector: Service by Cable Assembly — See Part Catalog
Description: F (BK)

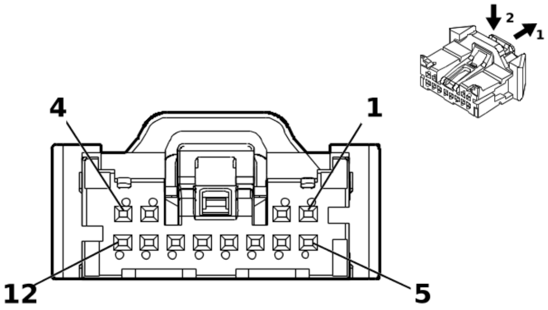
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B174G Frontview Camera - Grille (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Front Vision Camera 1 Coaxial Video Signal	I	—

B174W Frontview Camera - Windshield (UEU/UHX)



5360826

Connector Part Information

Harness Type: Headliner
OEM Connector: 35068239
Service Connector: 13529935
Description: 12 <p01>-Way F 050 CTS Series(BK)

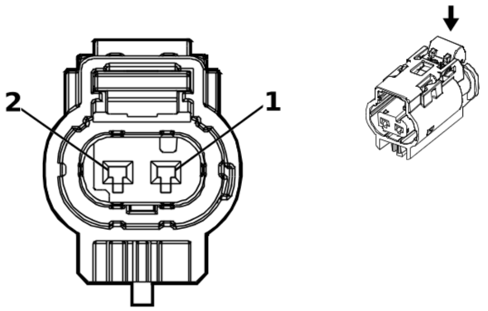
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84944580	EL-35616-58 (BK)	EL-38125-58

B174W Frontview Camera - Windshield (UEU/UHX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / WH	1851	Signal Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	RD / GN	3140	Battery Positive Voltage	I	—
4	0.35	WH	3152	Lane Departure Warning Indicator Control	I	—
5	0.35	BU / GY	3935	High Speed GMLAN Serial Data [+] 8	I	—
6	0.35	WH / GY	3936	High Speed GMLAN Serial Data [-] 8	I	—
7	0.35	BU / GY	3935	High Speed GMLAN Serial Data [+] 8	I	—
8	0.35	WH / GY	3936	High Speed GMLAN Serial Data [-] 8	I	—
9	0.35	WH / BU	5986	Serial Data Communication Enable	I	—
10	0.35	GY / WH	3153	Lane Departure Warning Disable Switch Signal	I	—
11	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
12	—	—	—	Not Occupied	—	—

B193A Charge Air Cooler Inlet Temperature Sensor (LM2)



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 10094234
Service Connector: 84727362
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

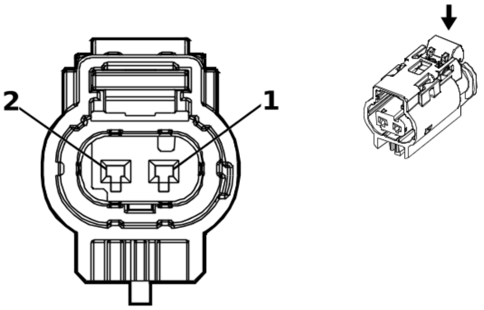
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B193A Charge Air Cooler Inlet Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	I	—
2	0.5	YE / BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	I	—

B193B Charge Air Cooler Outlet Temperature Sensor (LM2)



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 10094234
Service Connector: 84727362
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

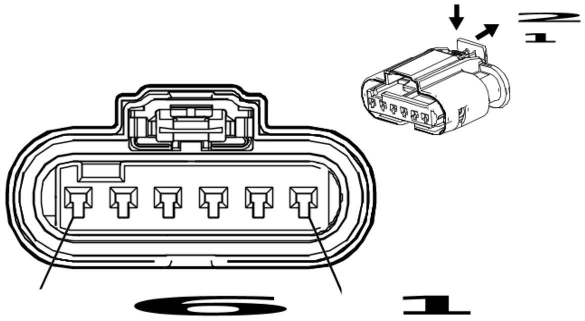
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B193B Charge Air Cooler Outlet Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	I	—
2	0.5	YE / BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	I	—

B195A Nitrogen Oxides Sensor 1 (LM2)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 34900-6119
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

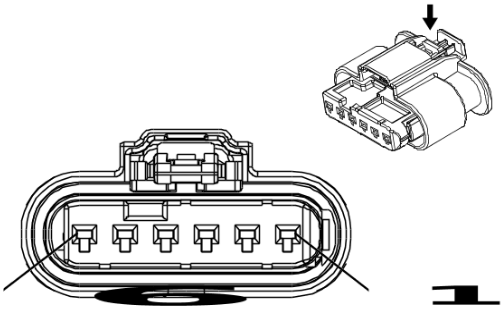
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B195A Nitrogen Oxides Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
2	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
3	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
4	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
5	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
6	0.75	BK / WH	451	Signal Ground	I	—

B195B Nitrogen Oxides Sensor 2 (LM2)



4455148

Connector Part Information

Harness Type: Chassis
OEM Connector: 34900-6128
Service Connector: 19368561
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

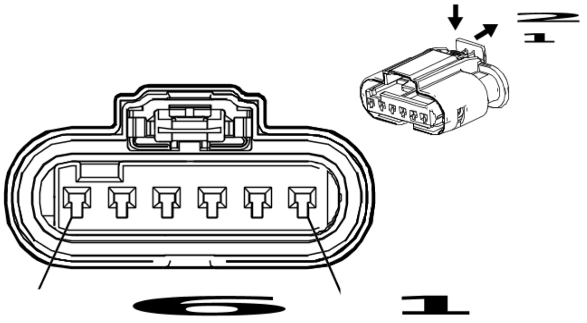
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B195B Nitrogen Oxides Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	3674	NOx Sensor 1 Control	I	—
2	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
3	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
4	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
5	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
6	0.75	BK / WH	1651	Signal Ground	I	—

B195C Nitrogen Oxides Sensor 3 (LM2)



3960142

Connector Part Information

Harness Type: Chassis
OEM Connector: 34900-6119
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

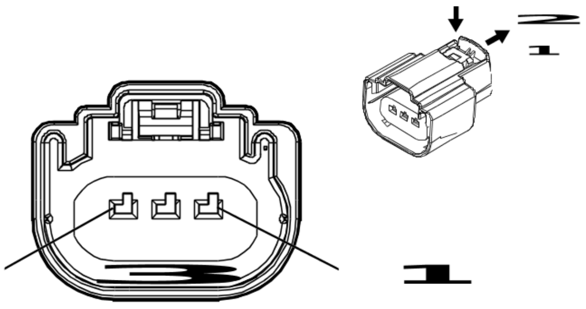
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B195C Nitrogen Oxides Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	3674	NOx Sensor 1 Control	I	—
2	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
3	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
4	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
5	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
6	0.75	BK / WH	1651	Signal Ground	I	—

B198 Fuel Composition Sensor (FHS)



4829227

Connector Part Information

Harness Type: Chassis
OEM Connector: 160073-3107
Service Connector: 19371197
Description: 3 <p01>-Way F 1.5 MX Series, Sealed(GY)

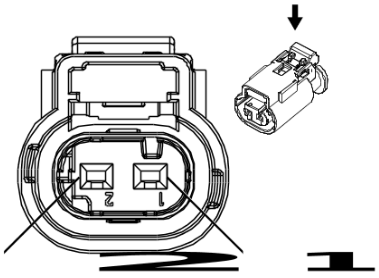
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B198 Fuel Composition Sensor (FHS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	BK / WH	451	Signal Ground	I	—
3	0.5	WH	1579	Fuel Temperature/Composition Signal	I	—

B203 Radiator Coolant Temperature Sensor (L3B)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

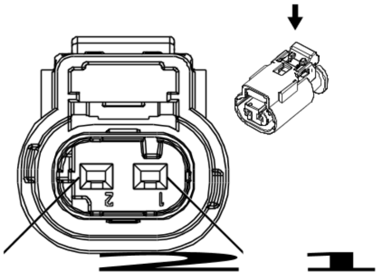
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B203 Radiator Coolant Temperature Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BK	3000	Coolant Temperature Sensor 2 Signal	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B203 Radiator Coolant Temperature Sensor (LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 10010337
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

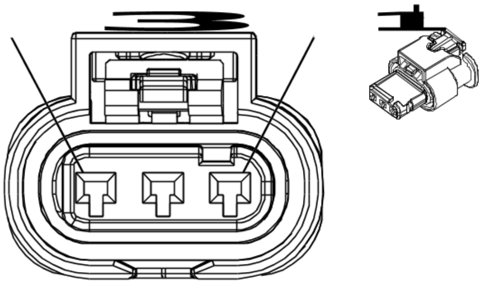
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B203 Radiator Coolant Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BK	3000	Coolant Temperature Sensor 2 Signal	I	—
2	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B212 Reductant Sensor Module (LM2)



2750649

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13722729
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON Series, Sealed(BK)

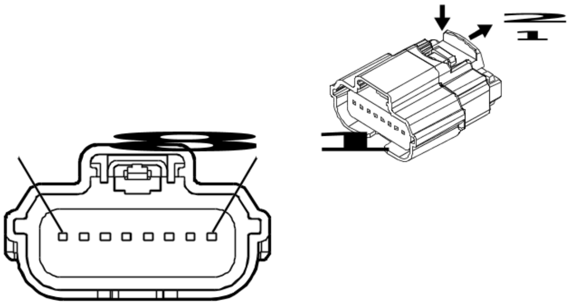
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B212 Reductant Sensor Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	7290	Diesel Exhaust Fluid Sensor Voltage Reference 1	I	—
2	0.5	BN	7284	Diesel Exhaust Fluid Liquid Quality Temperature Signal	I	—
3	0.5	BK	8434	Diesel Exhaust Fluid Sensor Low Reference	I	—

B218L Side Object Sensor Module - Left (UKC)



4708234

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 35198309
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F 64 Series, Sealed(BK)

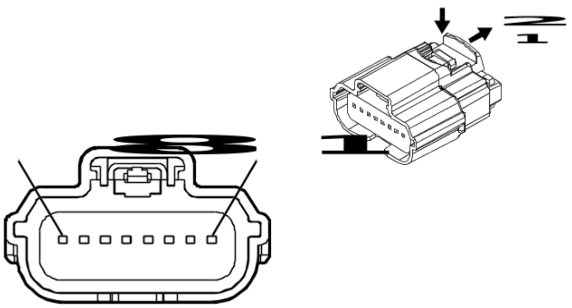
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B218L Side Object Sensor Module - Left (UKC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / YE	3810	High Speed GMLAN Serial Data [-] 5	I	—
2	0.5	BU / WH	3812	High Speed GMLAN Serial Data [+] 5	I	—
3	0.5	BK / WH	1751	Signal Ground	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
7	0.35	GY / YE	1760	Left Side Object Detection LED Control	I	—
8	0.5	RD / GN	1840	Battery Positive Voltage	I	—

B218R Side Object Sensor Module - Right (UKC)



4708234

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 35198309
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F 64 Series, Sealed(BK)

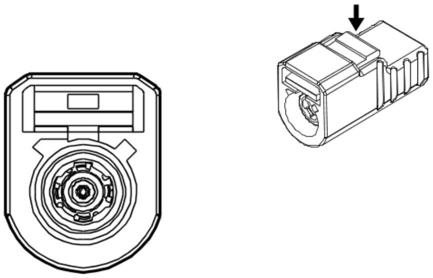
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B218R Side Object Sensor Module - Right (UKC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / YE	3810	High Speed GMLAN Serial Data [-] 5	I	—
2	0.5	BU / WH	3812	High Speed GMLAN Serial Data [+] 5	I	—
3	0.5	BK / WH	1751	Signal Ground	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
7	0.35	GY	1761	Right Side Object Detection LED Control	I	—
8	0.5	RD / GN	1840	Battery Positive Voltage	I	—

B225L Sideview Camera - Left (UVI/UVS)



4883521

Connector Part Information

Harness Type: Driver Outside Rearview Mirror COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

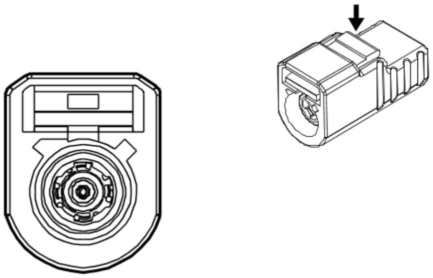
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B225L Sideview Camera - Left (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Coaxial Antenna TV1 Signal	I	—

B225R Sideview Camera - Right (UVI/UVS)



Connector Part Information

Harness Type: Passenger Outside Rearview Mirror COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

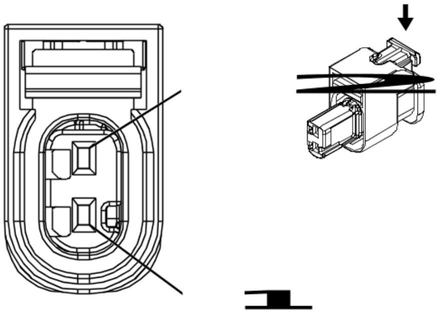
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B225R Sideview Camera - Right (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Coaxial Antenna TV2 Signal	I	—

B280 Automatic Transmission Accumulator Solenoid Valve (MQE)



4051102

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2138873-4
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BN)

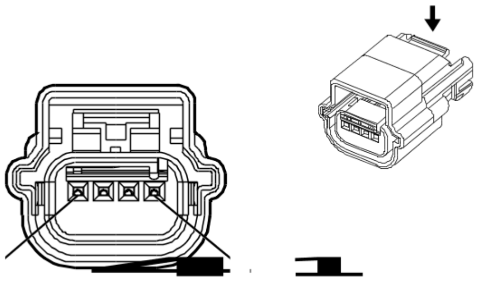
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B280 Automatic Transmission Accumulator Solenoid Valve (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GN	4579	Surge Accumulator Solenoid High Side Control	I	—
2	0.5	WH / GY	4578	Surge Accumulator Solenoid Valve Low Side Control	I	—

B303 Transmission Range Sensor (MQB)



4789353

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 6006314801
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64 Series, Sealed(BK)

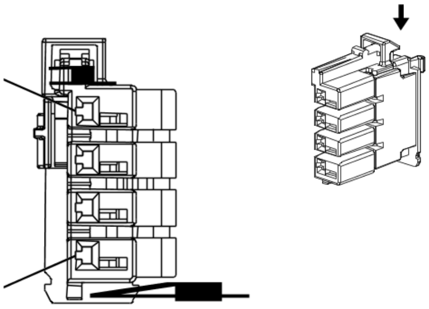
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

B303 Transmission Range Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GY	3927	Transmission Internal Mode Switch Feedback Signal	I	—
2	0.5	YE	5724	Ignition Mode Switch Mode Control	I	—
3	0.5	YE / GY	5726	Ignition Mode Switch Mode Control Backup	I	—
4	0.5	OG	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B303 Transmission Range Sensor (MQE)



4364148

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289524-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2 MCON Series(BN)

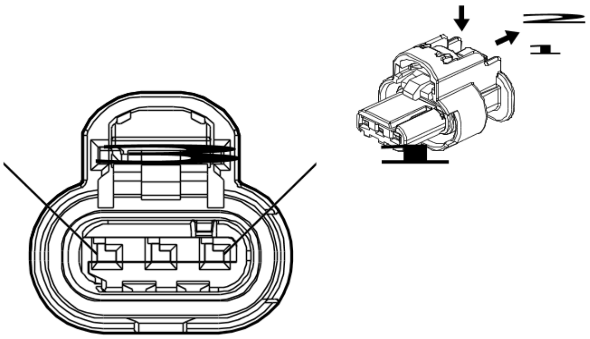
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B303 Transmission Range Sensor (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3337	Transmission Internal Mode Switch Mode Control Y	I	—
2	0.5	WH / RD	596	5V Reference	I	—
3	0.5	BK / GY	3927	Transmission Internal Mode Switch Feedback Signal	I	—
4	0.5	BU / WH	3338	Transmission Internal Mode Switch Mode Control X	I	—

B306A Parking Assist Sensor - Front Left Outer (UD5)



4581126

Connector Part Information

Harness Type: Front Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

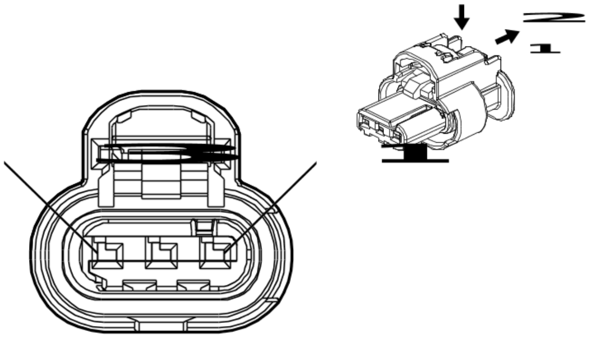
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306A Parking Assist Sensor - Front Left Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	5213	Front Left/Right/Middle Parking Assist Sensor	I	—
2	0.5	VT / WH	5215	Left Front Outer Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306B Parking Assist Sensor - Front Left Middle (UD5)



4581126

Connector Part Information

Harness Type: Front Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

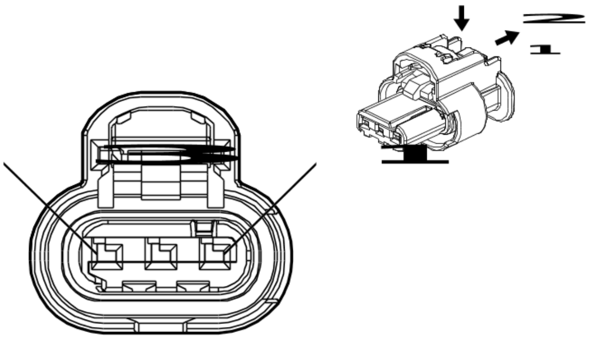
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306B Parking Assist Sensor - Front Left Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	5213	Front Left/Right/Middle Parking Assist Sensor	I	—
2	0.5	YE / GY	5216	Left Front Middle Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306C Parking Assist Sensor - Front Right Middle (UD5)



4581126

Connector Part Information

Harness Type: Front Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

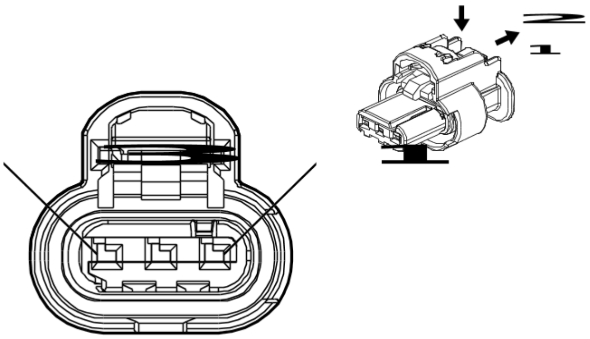
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306C Parking Assist Sensor - Front Right Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	5213	Front Left/Right/Middle Parking Assist Sensor	I	—
2	0.5	VT / GY	5218	Right Front Middle Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306D Parking Assist Sensor - Front Right Outer (UD5)



4581126

Connector Part Information

Harness Type: Front Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

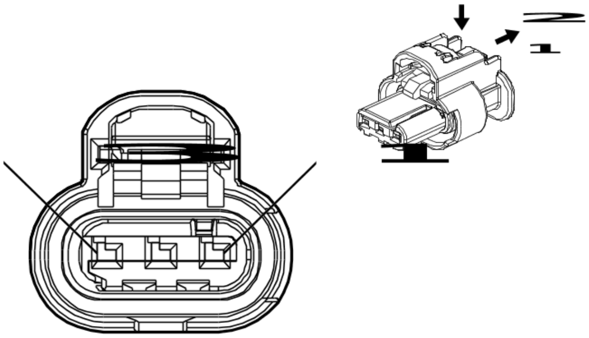
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306D Parking Assist Sensor - Front Right Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	5213	Front Left/Right/Middle Parking Assist Sensor	I	—
2	0.5	WH / GY	5217	Right Front Outer Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

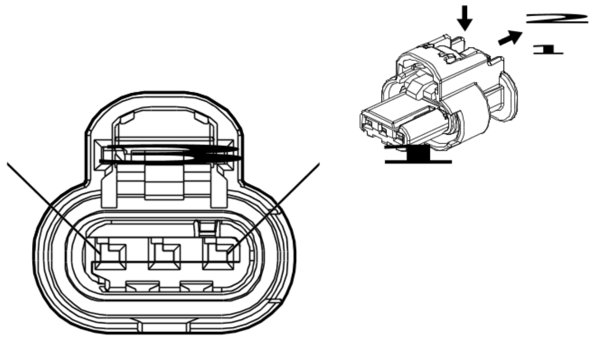
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

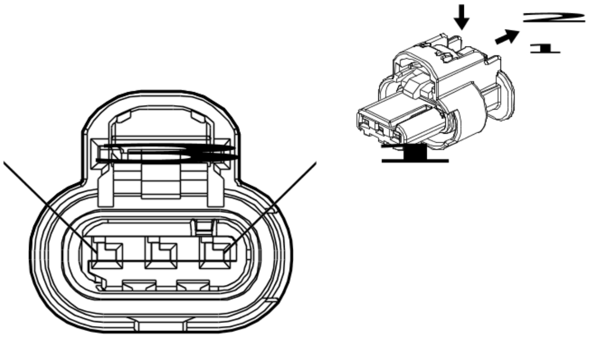
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

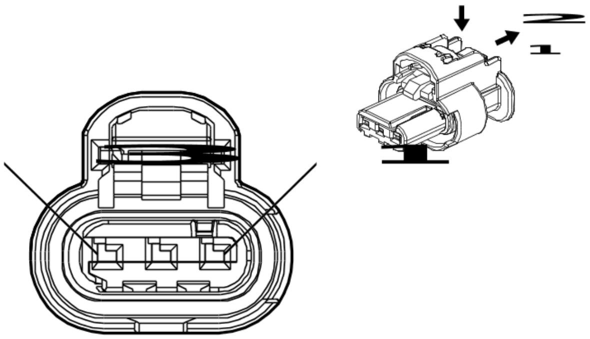
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

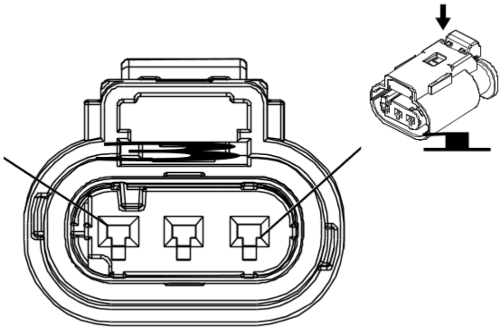
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B310 Fuel Pressure/Temperature Sensor (L3B)



3240107

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13503573
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

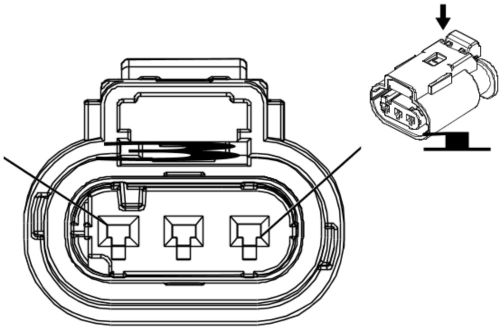
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B310 Fuel Pressure/Temperature Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
2	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)



3240107

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503573
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

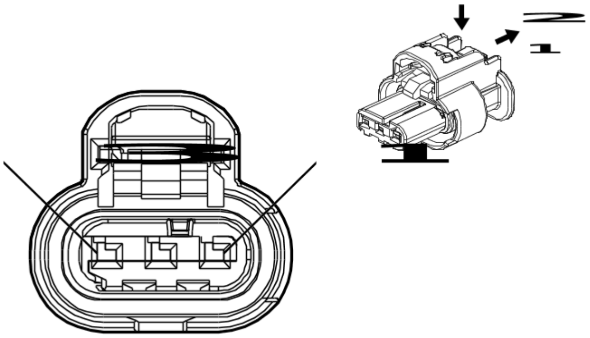
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GN	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
3	0.5	BN / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B321 Crankcase Pressure Sensor (LM2)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-2
Service Connector: 19371199
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

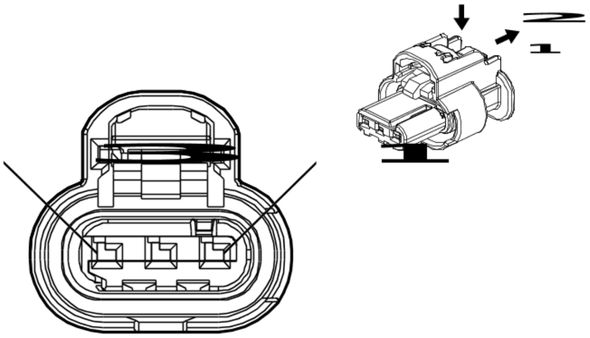
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B321 Crankcase Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	YE / GY	3926	Crankcase Differential Pressure Sensor Signal	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B338A Intake Camshaft Profile Sleeve Position Sensor 1 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

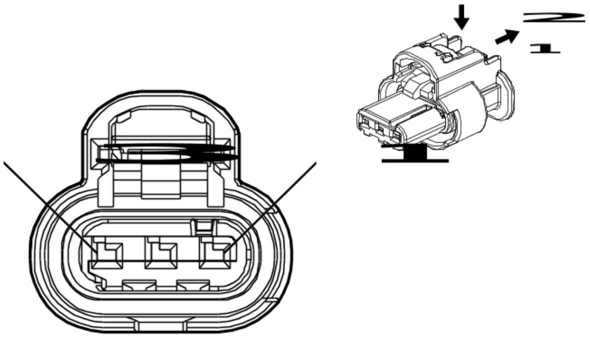
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B338A Intake Camshaft Profile Sleeve Position Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
3	0.5	VT / WH	3744	Camshaft Intake Lobe Axial Position Signal 1	I	—

B338B Intake Camshaft Profile Sleeve Position Sensor 2 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

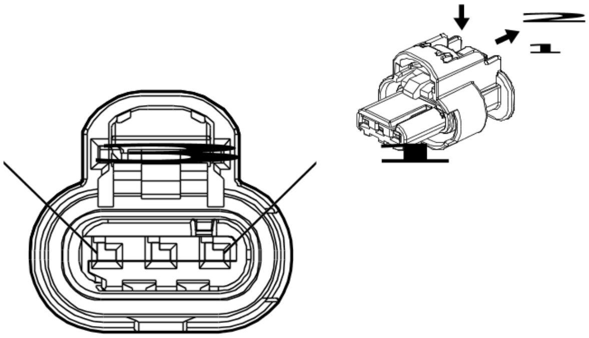
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B338B Intake Camshaft Profile Sleeve Position Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
3	0.5	VT / GN	3745	Camshaft Intake Lobe Axial Position Signal 2	I	—

B339A Exhaust Camshaft Profile Sleeve Position Sensor 1 (L3B)



Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

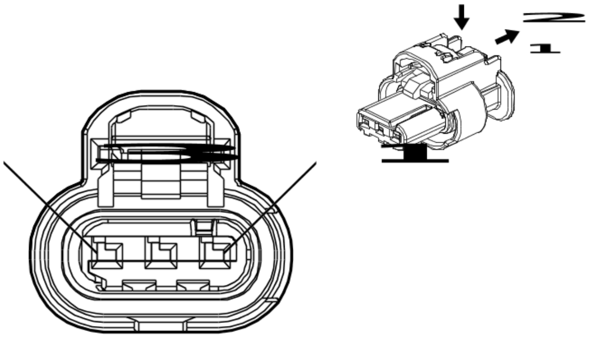
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B339A Exhaust Camshaft Profile Sleeve Position Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
3	0.5	YE / WH	3746	Camshaft Exhaust Lobe Axial Position Signal 1	I	—

B339B Exhaust Camshaft Profile Sleeve Position Sensor 2 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

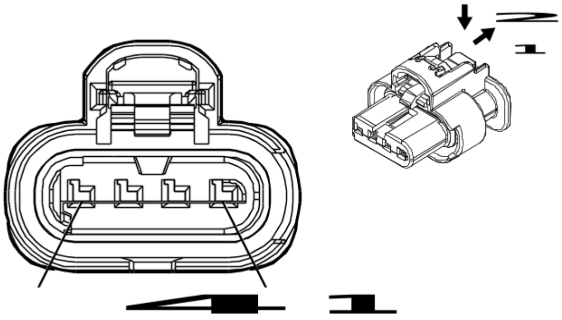
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B339B Exhaust Camshaft Profile Sleeve Position Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
3	0.5	YE / GN	3747	Camshaft Exhaust Lobe Axial Position Signal 2	I	—

B342A UHF Low Energy Remote Control Access Sensor Transceiver 1 (BOP)



4973942

Connector Part Information

Harness Type: Body
OEM Connector: 35075013
Service Connector: 19370713
Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(GY)

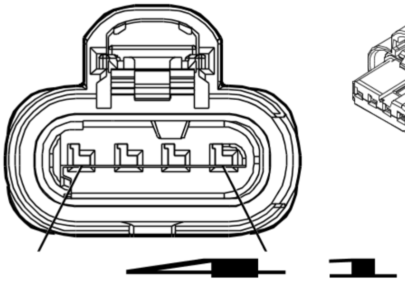
Terminal Part Information

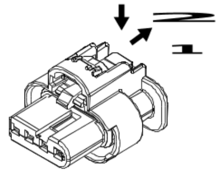
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B342A UHF Low Energy Remote Control Access Sensor Transceiver 1 (BOP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	2738	Virtual Key Module LIN Bus 1	I	—
2	0.5	RD / YE	2340	Battery Positive Voltage	I	—
3	0.5	BK / WH	1151	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

B342B UHF Low Energy Remote Control Access Sensor Transceiver 2 (BOP)





4900699

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296696-7
Service Connector: 84769084
Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

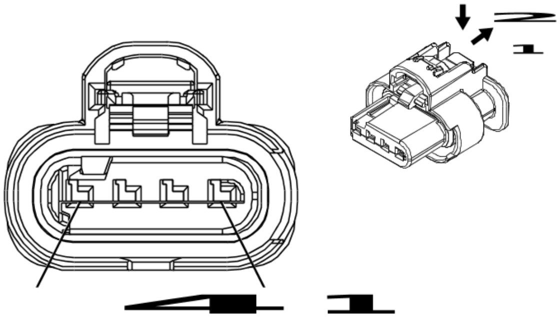
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B342B UHF Low Energy Remote Control Access Sensor Transceiver 2 (BOP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	2738	Virtual Key Module LIN Bus 1	I	—
2	0.5	RD / YE	2340	Battery Positive Voltage	I	—
3	0.5	BK / WH	1751	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

B342C UHF Low Energy Remote Control Access Sensor Transceiver 3 (BOP)



4210809

Connector Part Information

Harness Type: Body
OEM Connector: 33390897
Service Connector: 19367009
Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

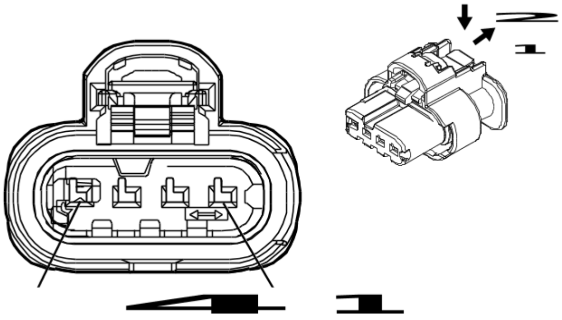
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B342C UHF Low Energy Remote Control Access Sensor Transceiver 3 (BOP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	2738	Virtual Key Module LIN Bus 1	I	—
2	0.5	RD / YE	2340	Battery Positive Voltage	I	—
3	0.5	BK / WH	1151	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

B342D UHF Low Energy Remote Control Access Sensor Transceiver 4 (BOP)



4934614

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296696-2
Service Connector: 19371196
Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

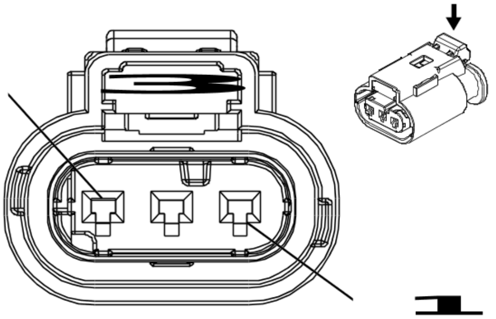
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B342D UHF Low Energy Remote Control Access Sensor Transceiver 4 (BOP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	2738	Virtual Key Module LIN Bus 1	I	—
2	0.5	RD / YE	2340	Battery Positive Voltage	I	—
3	0.5	BK / WH	1751	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)



2687961

Connector Part Information

Harness Type: Engine
OEM Connector: 10010342
Service Connector: 13422451
Description: 3 <p01>-Way F 1.2 Multilock Series, Sealed(NA)

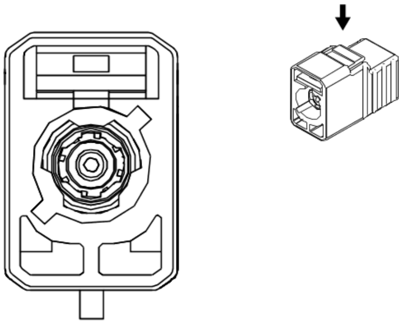
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	VT / GY	7246	Exhaust Gas Recirculation Differential Pressure Signal 1	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B352 Video Display Inside Rearview Mirror Camera (DRZ)



Connector Part Information

Harness Type: Rearview Camera Jumper LVDS
OEM Connector: 13583914
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B352 Video Display Inside Rearview Mirror Camera (DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	709	Left Park Lamp Control	I	—
3	—	BK	150	Ground	I	—

E2LR Side Marker Lamp - Left Rear (GF3/GF5)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: —

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E2LR Side Marker Lamp - Left Rear (GF3/GF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	709	Left Park Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	309	Right Park Lamp Control	I	—
3	—	BK	250	Ground	I	—

E2RR Side Marker Lamp - Right Rear (GF3/GF5)

—

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E2RR Side Marker Lamp - Right Rear (GF3/GF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	309	Right Park Lamp Control	I	—
2	—	BK	1750	Ground	I	—

E4E Headlamp - Left High Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4E Headlamp - Left High Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	711	Left Headlamp High Beam Control	I	—
2	—	BK	150	Ground	I	—

E4F Headlamp - Right High Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4F Headlamp - Right High Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	311	Right Headlamp High Beam Control	I	—
2	—	BK	250	Ground	I	—

E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	712	Left Headlamp Low Beam Control	I	—
2	—	BK	150	Ground	I	—

E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	312	Right Headlamp Low Beam Control	I	—
2	—	BK	250	Ground	I	—

E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: L90002902
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	150	Ground	I	—

E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	709	Left Park Lamp Control	I	—
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	150	Ground	I	—

E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	309	Right Park Lamp Control	I	—
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	250	Ground	I	—

E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: L90002902
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	250	Ground	I	—

E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	24	Backup Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)

—

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

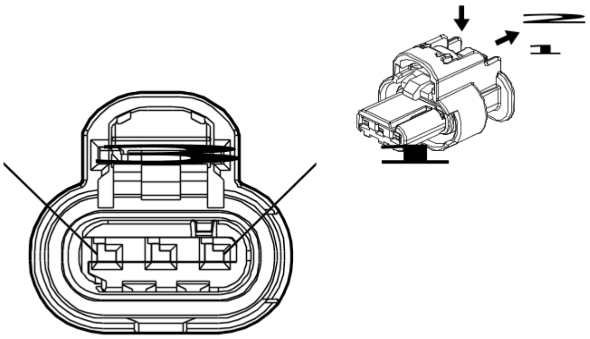
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	24	Backup Lamp Control	I	—
2	—	BK	1750	Ground	I	—

E6 Center High Mounted Stop Lamp (EXTENDED CAB/CREW CAB)



4581126

Connector Part Information

Harness Type: Center High Mount Stop Lamp Jumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

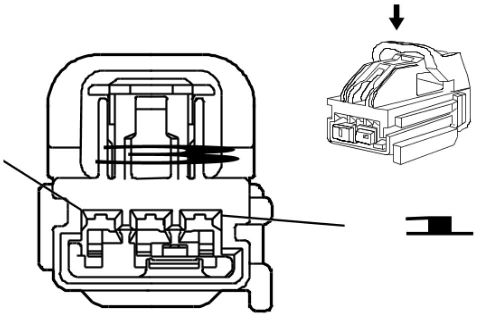
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

E6 Center High Mounted Stop Lamp (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / VT	1430	Exterior Courtesy Lamp Control	I	—
2	0.35	VT / WH	5065	Stop Lamp Relay Coil Control	I	—
3	0.35	BK	1050	Ground	I	—

E6 Center High Mounted Stop Lamp (REGULAR CAB)



1787799

Connector Part Information

Harness Type: Headliner
OEM Connector: 10847008
Service Connector: 19149536
Description: 3 <p01>-Way F 1.5 Kaizen Series(L-GY)

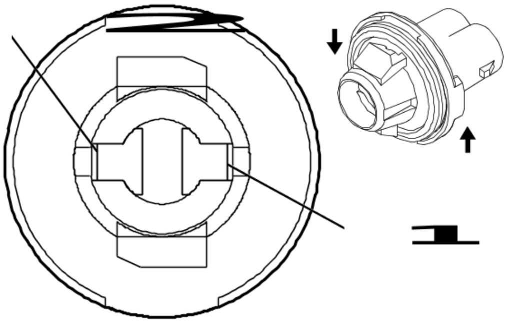
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E6 Center High Mounted Stop Lamp (REGULAR CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / VT	1430	Exterior Courtesy Lamp Control	I	—
2	0.5	VT / GY	1054	Stop Lamp Control	I	—
3	0.5	BK	1050	Ground	I	—

E7 License Plate Lamp (ZW9)



5153536

Connector Part Information

Harness Type: License Plate Lamp Jumper
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F Lamp Socket Wedge Base, Type W-2(D-GY)

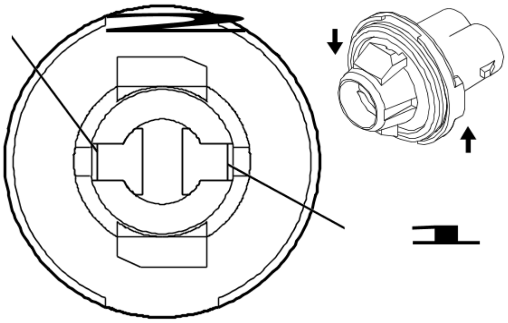
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E7 License Plate Lamp (ZW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN / YE	6846	Rear License Plate Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E7L License Plate Lamp - Left (E63)



5153536

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F Lamp Socket Wedge Base, Type W-2(D-GY)

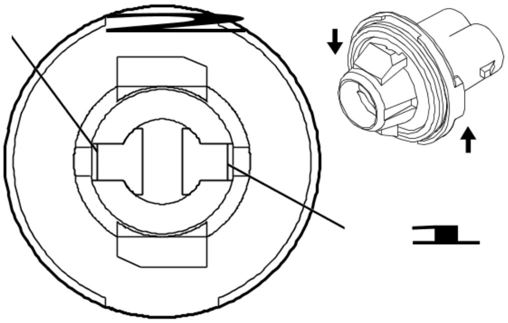
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E7L License Plate Lamp - Left (E63)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	6846	Rear License Plate Lamp Control	I	—
2	0.5	BK	1450	Ground	I	—

E7R License Plate Lamp - Right (E63)



5153536

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F Lamp Socket Wedge Base, Type W-2(D-GY)

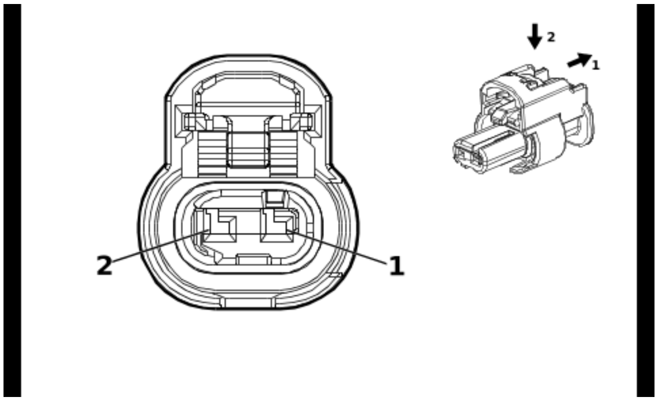
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E7R License Plate Lamp - Right (E63)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	6846	Rear License Plate Lamp Control	I	—
2	0.5	BK	1450	Ground	I	—

E8L Liftgate Courtesy Lamp (QT5/QT6)



4649903

Connector Part Information

Harness Type: Endgate
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

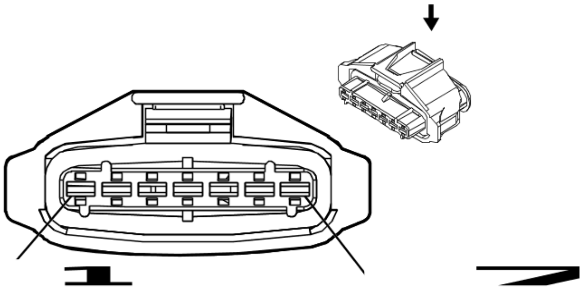
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

E8L Liftgate Courtesy Lamp (QT5/QT6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / VT	1430	Exterior Courtesy Lamp Control	I	—
2	0.75	BK	1450	Ground	I	—

E11A Fuel Heater/Water in Fuel Sensor (LM2)



2537256

Connector Part Information

Harness Type: Chassis
OEM Connector: 1928403222
Service Connector: 19354080
Description: 7 <p01>-Way F 2.8 Junior Power Timer Series, Sealed(BK)

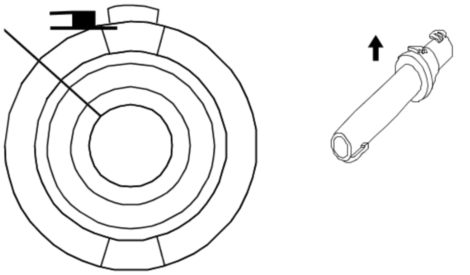
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

E11A Fuel Heater/Water in Fuel Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1750	Ground	I	—
2	2.5	VT / GN	355	Fuel Filter Heater Control Circuit	I	—
3	0.5	WH / RD	6862	Water In Fuel Sensor Voltage Reference	I	—
4	0.5	BK / BU	6863	Water In Fuel Sensor Low Reference	I	—
5	0.5	BU / YE	6861	Water In Fuel Sensor Signal	I	—
6	0.5	BN / VT	455	Fuel Filter Temperature Signal	I	—
7	0.5	BK / VT	412	Fuel Filter Temperature Sensor Low Reference	I	—

E12A Glow Plug 1 (LM2)



Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 284818-1
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F 4.0 Series(BK)

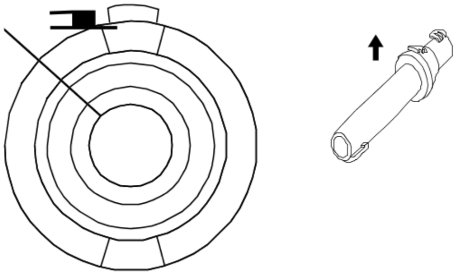
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E12A Glow Plug 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / RD	1581	Glow Plug 1 Control	I	—

E12B Glow Plug 2 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 284818-1
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F 4.0 Series(BK)

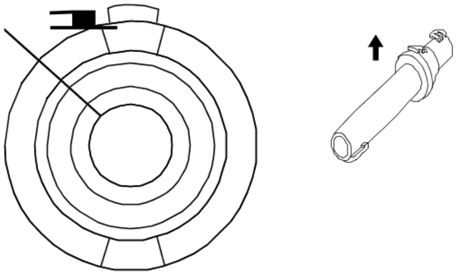
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E12B Glow Plug 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / BK	1582	Glow Plug 2 Control	I	—

E12C Glow Plug 3 (LM2)



Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 284818-1
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F 4.0 Series(BK)

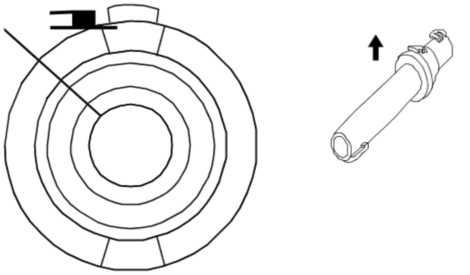
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E12C Glow Plug 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / GN	1583	Glow Plug 3 Control	I	—

E12D Glow Plug 4 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 284818-1
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F 4.0 Series(BK)

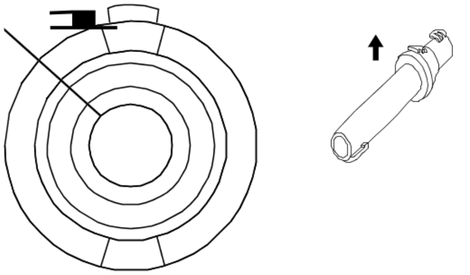
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E12D Glow Plug 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / YE	1584	Glow Plug 4 Control	I	—

E12E Glow Plug 5 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 284818-1
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F 4.0 Series(BK)

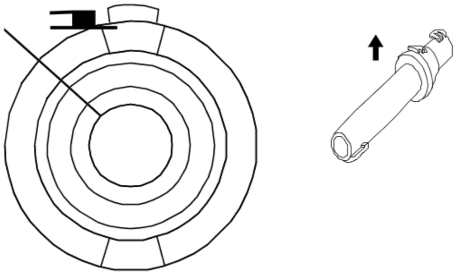
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E12E Glow Plug 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / WH	1585	Glow Plug 5 Control	I	—

E12F Glow Plug 6 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 284818-1
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1 <p01>-Way F 4.0 Series(BK)

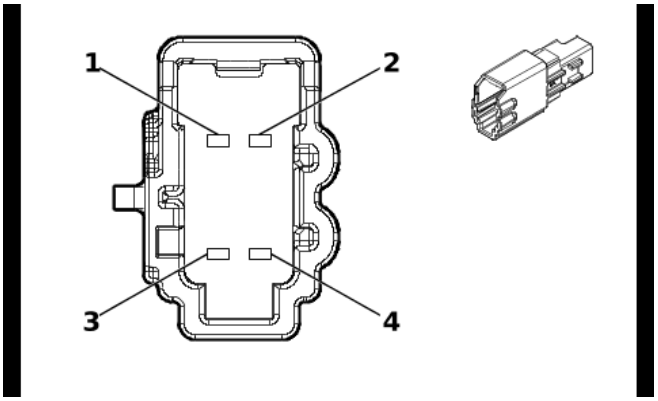
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E12F Glow Plug 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY	1586	Glow Plug 6 Control	I	—

E14A Seat Heating Element - Driver Back (KA1)



5423974

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(GY)

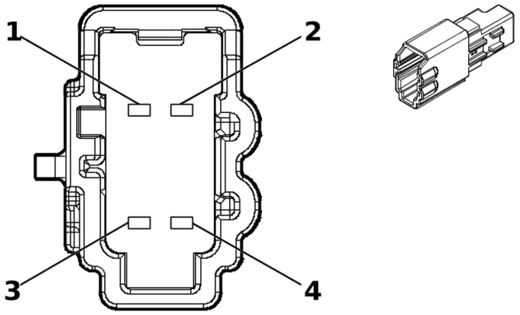
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

E14A Seat Heating Element - Driver Back (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	2432	Driver Seat Back Heating Element Control	I	—
2	0.5	BU	2425	Driver Seat Back Heating Temperature Sensor Signal	I	—
3	0.5	BK / VT	2426	Driver Heated Back Thermistor Low Reference	I	—
4	0.75	BN / BK	2078	Driver Seat Heating Element Low Reference	I	—

E14B Seat Heating Element - Driver Cushion (KA1)



5360963

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 13530132
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(BK)

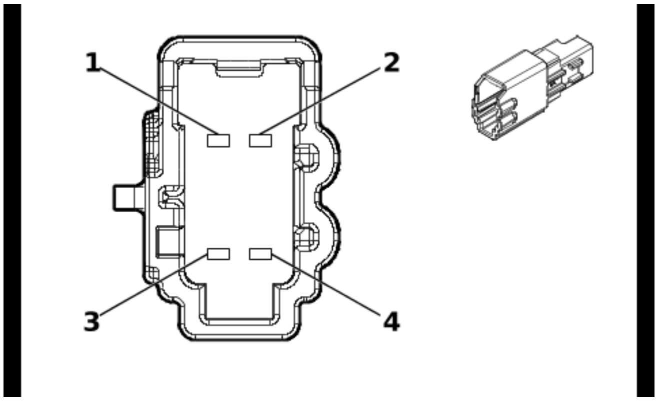
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

E14B Seat Heating Element - Driver Cushion (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / VT	2077	Driver Seat Heating Element Control	I	—
2	0.5	YE / GY	2079	Driver Seat Heating Temperature Sensor Signal	I	—
3	0.5	BK / YE	2080	Driver Heated Seat Thermistor Low Reference	I	—
4	0.75	BN / BK	2078	Driver Seat Heating Element Low Reference	I	—

E14C Seat Heating Element - Passenger Back (KA1)



5423974

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(GY)

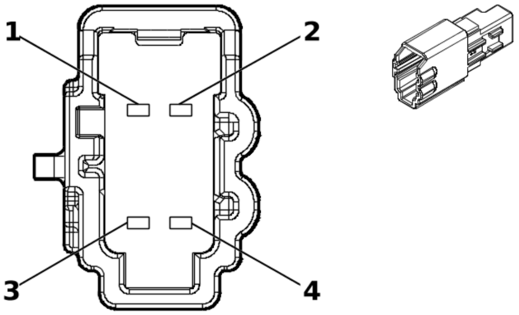
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

E14C Seat Heating Element - Passenger Back (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	2481	Passenger Seat Back Heating Element Control	I	—
2	0.5	WH / BU	2436	Passenger Seat Back Heating Temperature Sensor Signal	I	—
3	0.5	BK / GN	2482	Passenger Heated Back Thermistor Low Reference	I	—
4	0.75	GY / BK	2480	Passenger Seat Heating Element Low Reference	I	—

E14D Seat Heating Element - Passenger Cushion (KA1)



5360963

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(BK)

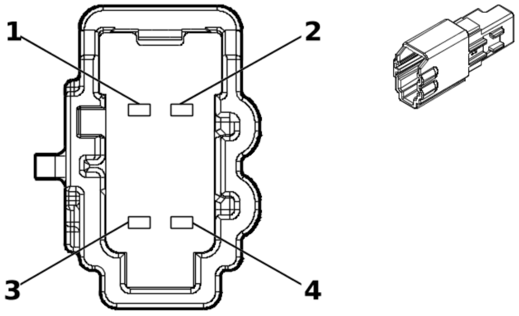
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

E14D Seat Heating Element - Passenger Cushion (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	2479	Passenger Seat Heating Element Control	I	—
2	0.5	WH / GY	2434	Passenger Seat Heating Temperature Sensor Signal	I	—
3	0.5	BK / GY	2435	Passenger Heated Seat Thermistor Low Reference	I	—
4	0.75	GY / BK	2480	Passenger Seat Heating Element Low Reference	I	—

E14F Seat Heating Element - Left Rear Cushion (KA6)



5360963

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(BK)

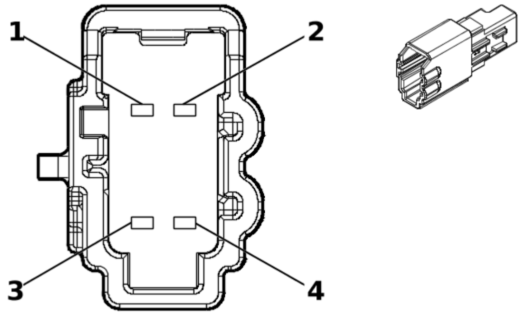
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

E14F Seat Heating Element - Left Rear Cushion (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	2294	Left Rear Seat Cushion Heating Element Control	I	—
2	0.75	WH / BU	7047	Left Rear Seat Cushion Temperature Sensor Signal	I	—
3	0.75	BU / WH	7048	Left Rear Cushion Thermistor Feedback Signal	I	—
4	0.75	BN / BK	2295	Left Rear Seat Cushion Heating Element Low Reference	I	—

E14H Seat Heating Element - Right Rear Cushion (KA6)



5360963

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(BK)

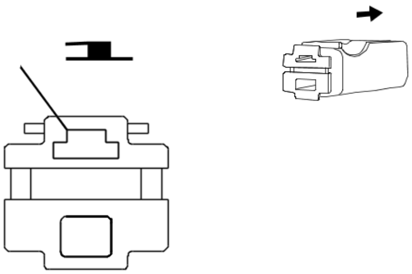
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

E14H Seat Heating Element - Right Rear Cushion (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BN	2296	Right Rear Seat Cushion Heating Element Control	I	—
2	0.75	YE / WH	7053	Right Rear Seat Cushion Temperature Sensor Signal	I	—
3	0.75	WH / BK	7054	Right Rear Cushion Thermistor Feedback Signal	I	—
4	0.75	GN / BK	2297	Right Rear Seat Cushion Heating Element Low Reference	I	—

E18 Rear Defogger Grid X1



Connector Part Information

Harness Type: Body
OEM Connector: 13511619
Service Connector: 19367647
Description: 1 <p01>-Way F 250 Series(BK)

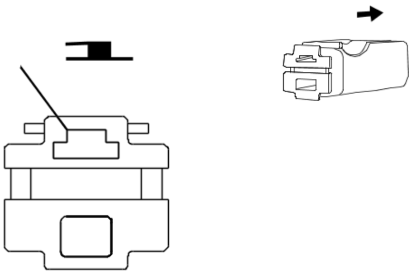
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

E18 Rear Defogger Grid X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BN / VT	293	Rear Defogger Grid Control	I	—

E18 Rear Defogger Grid X2



1413086

Connector Part Information

Harness Type: Body
OEM Connector: 13511619
Service Connector: 19367647
Description: 1 <p01>-Way F 250 Series(BK)

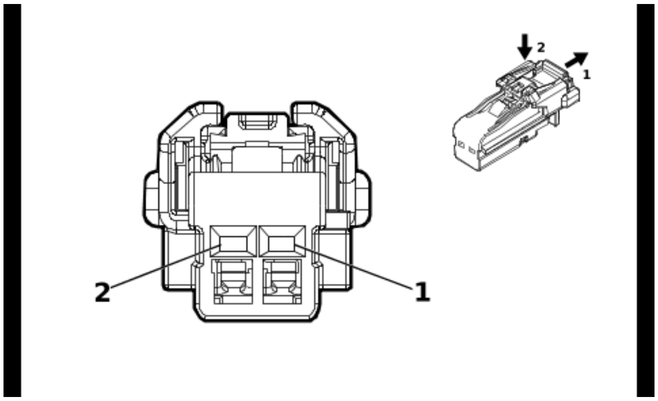
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

E18 Rear Defogger Grid X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1350	Ground	I	—

E28 Center Console Compartment Lamp (D07)



4115691

Connector Part Information

Harness Type: Floor Console
OEM Connector: 35026312
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Series(BK)

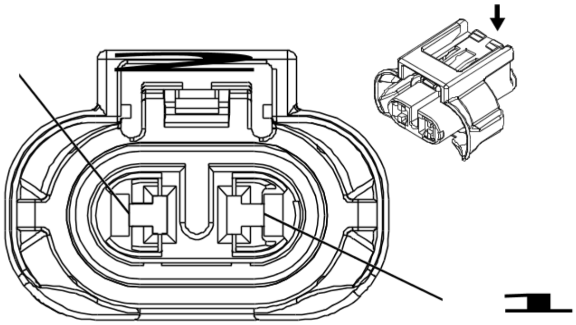
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

E28 Center Console Compartment Lamp (D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	I	—
2	0.5	WH / BN	6815	Inadvertent Load Control	I	—

E29LF Fog Lamp - Left Front (S3U)



3404058

Connector Part Information

Harness Type: Fog Lamp Accessory
OEM Connector: 13576004
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 APEX Series, Sealed(BK)

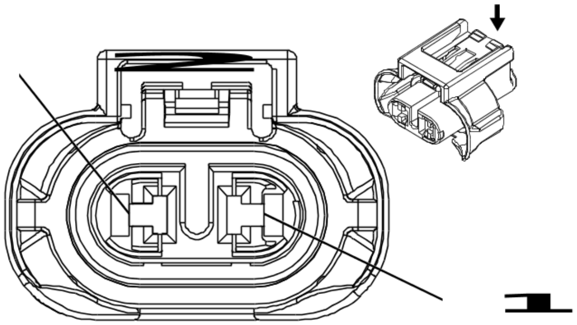
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E29LF Fog Lamp - Left Front (S3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / VT	2234	Front Fog Lamp Control	I	—
2	0.5	BK	250	Ground	I	—

E29LF Fog Lamp - Left Front (T3U)



3404058

Connector Part Information

Harness Type: Front Bumper
OEM Connector: 13818129
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 APEX Series, Sealed(BK)

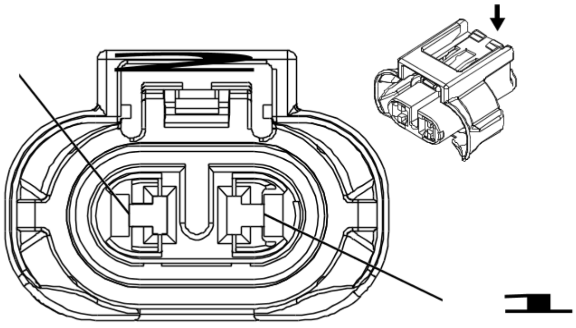
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E29LF Fog Lamp - Left Front (T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / VT	2234	Front Fog Lamp Control	I	—
2	0.5	BK	150	Ground	I	—

E29RF Fog Lamp - Right Front (S3U)



3404058

Connector Part Information

Harness Type: Fog Lamp Accessory
OEM Connector: 13576004
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 APEX Series, Sealed(BK)

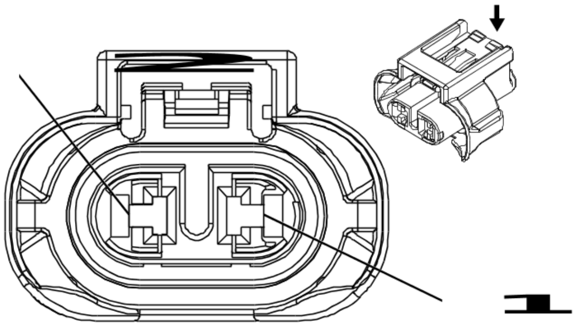
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E29RF Fog Lamp - Right Front (S3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / VT	2234	Front Fog Lamp Control	I	—
2	0.5	BK	250	Ground	I	—

E29RF Fog Lamp - Right Front (T3U)



3404058

Connector Part Information

Harness Type: Front Bumper
OEM Connector: 13930730
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 APEX Series, Sealed(BK)

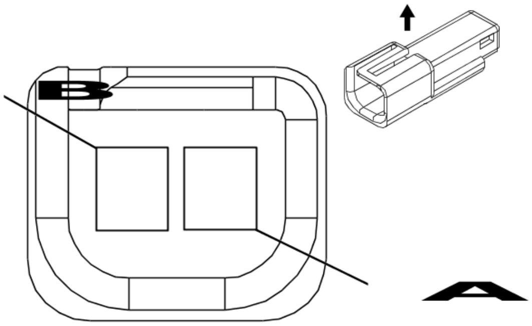
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E29RF Fog Lamp - Right Front (T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / VT	2234	Front Fog Lamp Control	I	—
2	0.5	BK	250	Ground	I	—

E31L Sunshade Mirror Lamp - Left



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2 <p01>-Way M 150 Metri-Pack Series(BK)

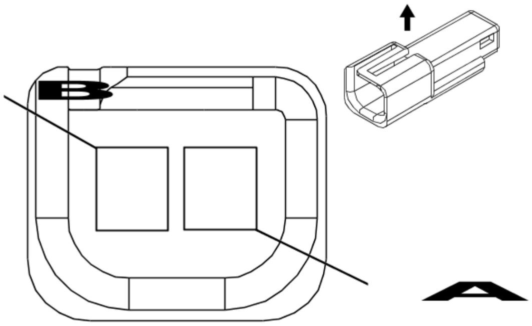
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

E31L Sunshade Mirror Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH / BN	6815	Inadvertent Load Control	I	—
B	0.5	BK	1050	Ground	I	—

E31R Sunshade Mirror Lamp - Right



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2 <p01>-Way M 150 Metri-Pack Series(BK)

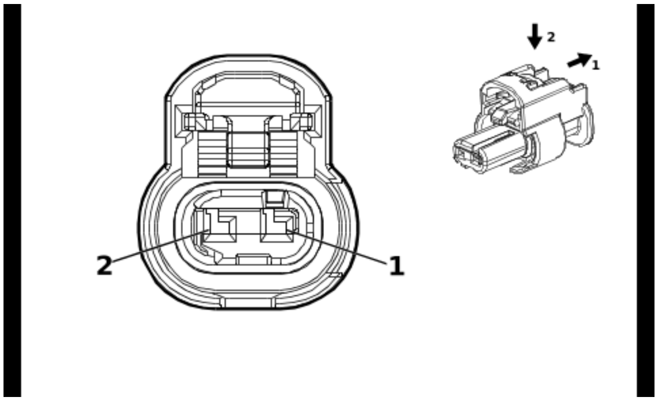
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

E31R Sunshade Mirror Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH / BN	6815	Inadvertent Load Control	I	—
B	0.5	BK	1050	Ground	I	—

E33L Cargo Lamp - Left (UF2)



4649903

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

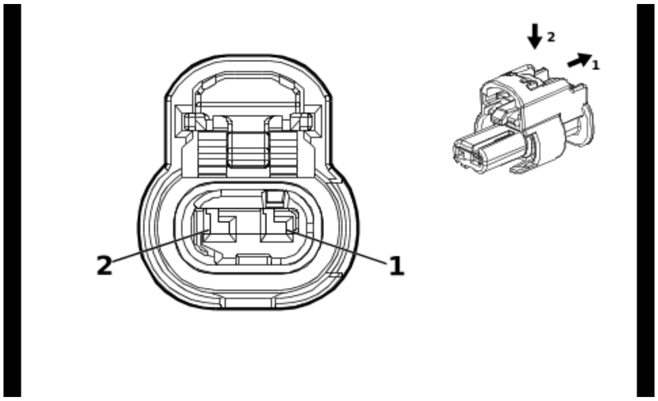
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E33L Cargo Lamp - Left (UF2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU	7762	Cargo Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E33R Cargo Lamp - Right (UF2)



4649903

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

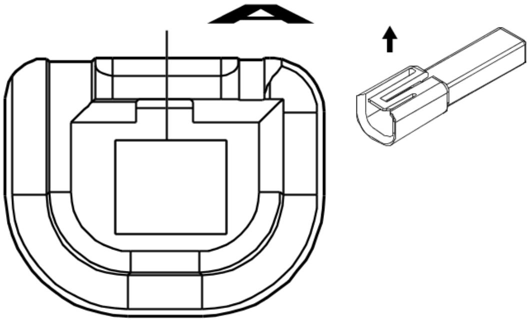
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E33R Cargo Lamp - Right (UF2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU	7762	Cargo Lamp Control	I	—
2	—	BK	1750	Ground	I	—

E35L Exterior Spot Lamp - Left (7X2/7X3/7X6/7X7)



611495

Connector Part Information

Harness Type: Spot Lamp
OEM Connector: 12047683
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way M 150 Metri-Pack Series(BK)

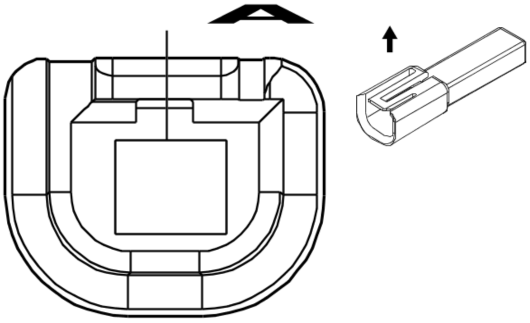
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

E35L Exterior Spot Lamp - Left (7X2/7X3/7X6/7X7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	RD / VT	4640	Battery Positive Voltage	I	—

E35R Exterior Spot Lamp - Right (7X2/7X3/7X6/7X7)



611495

Connector Part Information

Harness Type: Spot Lamp
OEM Connector: 12047683
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way M 150 Metri-Pack Series(BK)

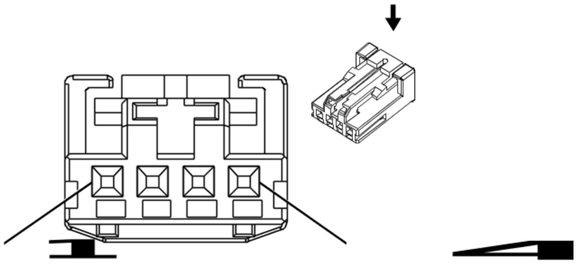
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

E35R Exterior Spot Lamp - Right (7X2/7X3/7X6/7X7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	RD / GY	4140	Battery Positive Voltage	I	—

E37B Dome/Reading Lamps - 2nd Row X1 (EXTENDED CAB/CREW CAB)



2717162

Connector Part Information

Harness Type: Headliner
OEM Connector: 13969166
Service Connector: 13587297
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

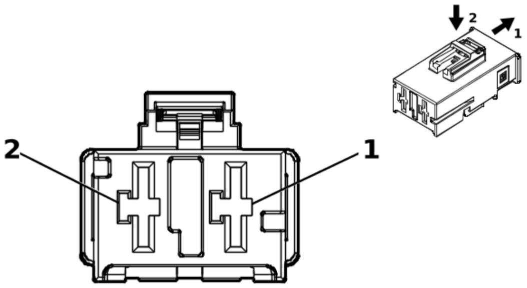
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

E37B Dome/Reading Lamps - 2nd Row X1 (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / YE	240	Battery Positive Voltage	I	—
2	0.35	GY	157	Interior Lamp Control	I	—
3	0.5	BK	1050	Ground	I	—
4	0.5	WH / BN	6815	Inadvertent Load Control	I	—

E40 Electrical Auxiliary Heater X1 (C32)



5187955

Connector Part Information

Harness Type: Electrical Auxiliary Heater Jumper
OEM Connector: 13525311
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 9.5 MCON-LL Series(BK)

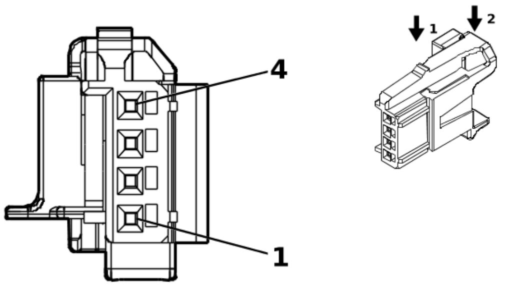
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-22 (RD)	No Tool Required

E40 Electrical Auxiliary Heater X1 (C32)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	RD / GY	642	Battery Positive Voltage	I	—

E40 Electrical Auxiliary Heater X2 (C32)



5191926

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2294399-1
Service Connector: 84724190
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

E40 Electrical Auxiliary Heater X2 (C32)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	3195	Auxiliary Heater Control	I	—
2	0.5	VT / GY	539	Run/Crank Ignition 1 Voltage	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK	1050	Ground	I	—

E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13503521
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F

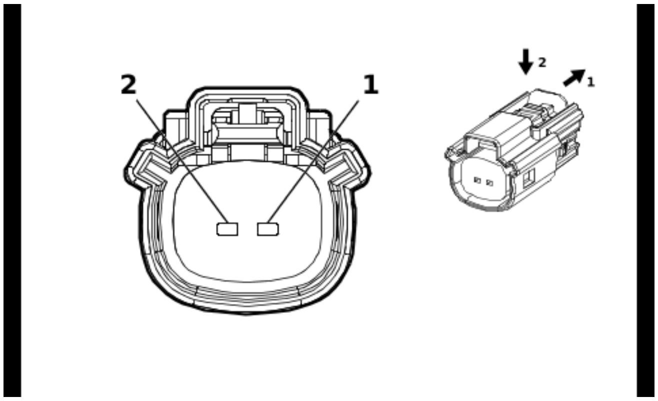
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	709	Left Park Lamp Control	I	—
2	0.75	RD	5356	Left Tail Lamp Outage Detection Signal	I	—
3	0.75	GN	18	Left Rear Stop/Turn Signal Lamp Control	I	—
4	0.75	BK	1450	Ground	I	—

E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)



2474713

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

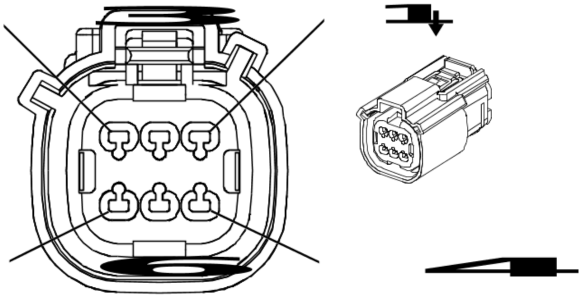
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1450	Ground	I	—
2	0.75	BN	709	Left Park Lamp Control	I	—

E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)



3225042

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13592503
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5 Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	709	Left Park Lamp Control	I	—
2	0.75	RD	5356	Left Tail Lamp Outage Detection Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN	24	Backup Lamp Control	I	—
5	0.75	GN	18	Left Rear Stop/Turn Signal Lamp Control	I	—
6	0.75	BK	1450	Ground	I	—

E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)

—

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: 13503521
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F

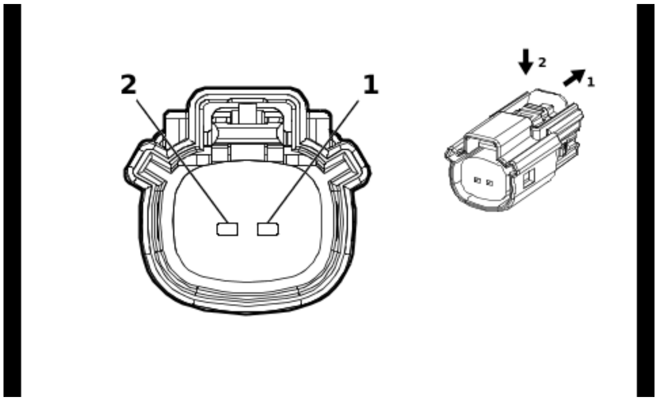
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	309	Right Park Lamp Control	I	—
2	0.75	RD	5357	Right Tail Lamp Outage Detection Signal	I	—
3	0.75	GN	19	Right Rear Stop/Turn Signal Lamp Control	I	—
4	0.75	BK	1750	Ground	I	—

E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)



2474713

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

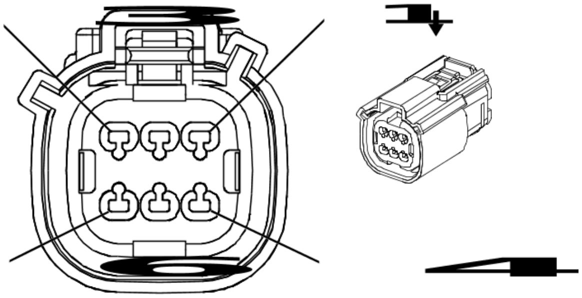
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1750	Ground	I	—
2	0.75	BN	309	Right Park Lamp Control	I	—

E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)



3225042

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: 13592503
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5 Series, Sealed(GY)

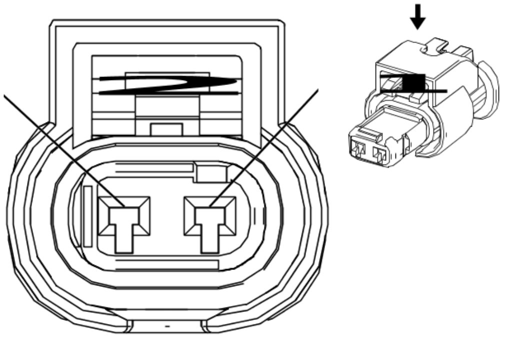
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	309	Right Park Lamp Control	I	—
2	0.75	RD	5357	Right Tail Lamp Outage Detection Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN	24	Backup Lamp Control	I	—
5	0.75	GN	19	Right Rear Stop/Turn Signal Lamp Control	I	—
6	0.75	BK	1750	Ground	I	—

E52 Reductant Line Heater (LM2)



Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13927761
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCP Series, Sealed(BK with BK Inner Connector)

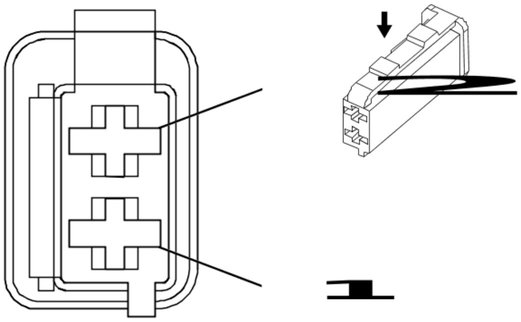
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E52 Reductant Line Heater (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	WH	3199	Diesel Exhaust Fluid Pressure Line Heater Control	I	—
2	1	BN	4319	Diesel Exhaust Fluid Line Heater Low Control	I	—

E63D Flood Lamp - Driver Door Handle (AU3)



2339593

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13670097
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.6 Timer Series(BK)

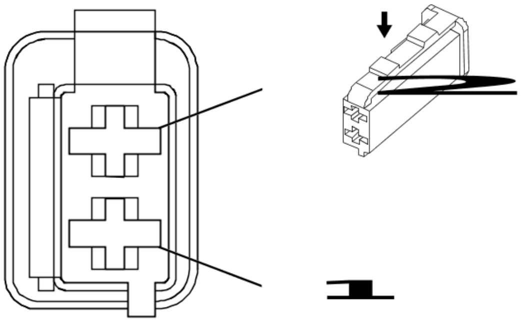
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E63D Flood Lamp - Driver Door Handle (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / YE	7557	Interior Door Handle Accent Lighting Control	I	—
2	0.35	BK	1150	Ground	I	—

E63P Flood Lamp - Passenger Door Handle (AU3)



2339593

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 13670097
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.6 Timer Series(BK)

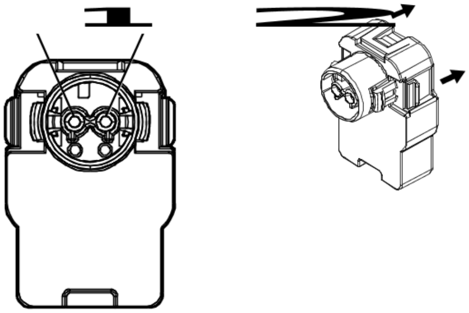
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E63P Flood Lamp - Passenger Door Handle (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / YE	7557	Interior Door Handle Accent Lighting Control	I	—
2	0.75	BK	1250	Ground	I	—

F101 Passenger Instrument Panel Air Bag X1



4823732

Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13598467
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.0 Series(PK with YE Cover)

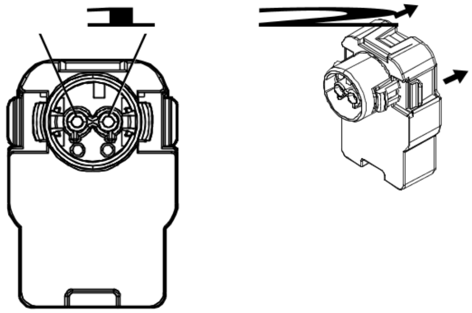
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

F101 Passenger Instrument Panel Air Bag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / OG	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
2	0.35	OG / WH	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—

F101 Passenger Instrument Panel Air Bag X2



4772246

Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13598468
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.0 Series(PU with YE Cover)

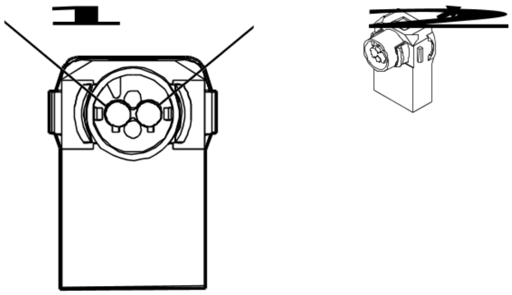
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

F101 Passenger Instrument Panel Air Bag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / OG	3027	Passenger Instrument Panel Air Bag Stage 2 High Control	I	—
2	—	OG / VT	3026	Passenger Instrument Panel Air Bag Stage 2 Low Control	I	—

F105L Roof Rail Air Bag - Left



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2 <p01>-Way F ABX-5 Series(GY with YE Cover)

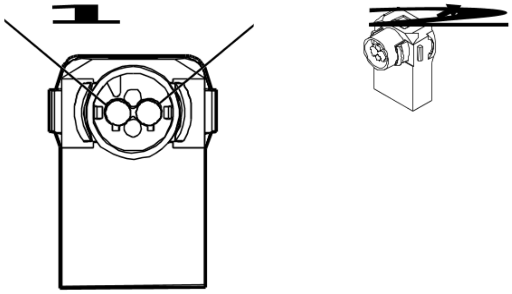
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F105L Roof Rail Air Bag - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	5019	Left Front Roof Rail Air Bag High Control	I	—
2	0.5	VT / OG	5020	Left Front Roof Rail Air Bag Low Control	I	—

F105R Roof Rail Air Bag - Right



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2 <p01>-Way F ABX-5 Series(GY with YE Cover)

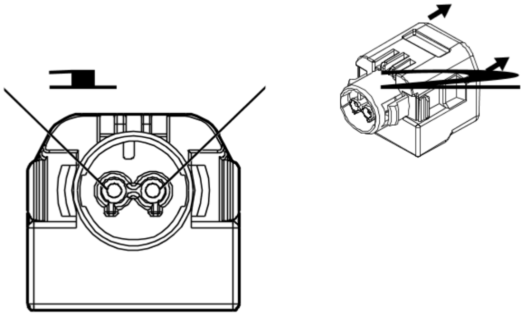
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F105R Roof Rail Air Bag - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GY	5021	Right Front Roof Rail Air Bag High Control	I	—
2	0.5	WH / OG	5022	Right Front Roof Rail Air Bag Low Control	I	—

F106D Seat Side Air Bag - Driver



Connector Part Information

Harness Type: Driver Seat
OEM Connector: 1-1802367-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.0 Series(PK with YE Cover)

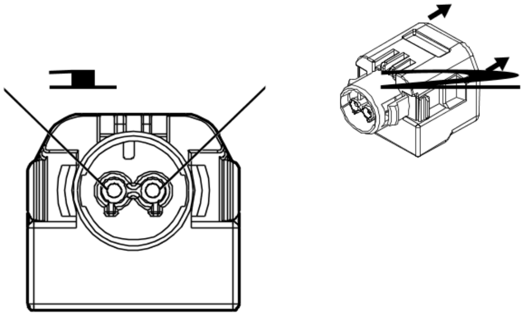
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

F106D Seat Side Air Bag - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BU	3068	Driver Seat Side Air Bag High Control	I	—
2	0.5	GN / OG	3069	Driver Seat Side Air Bag Low Control	I	—

F106P Seat Side Air Bag - Passenger



4772226

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 1-1802367-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.0 Series(PK with YE Cover)

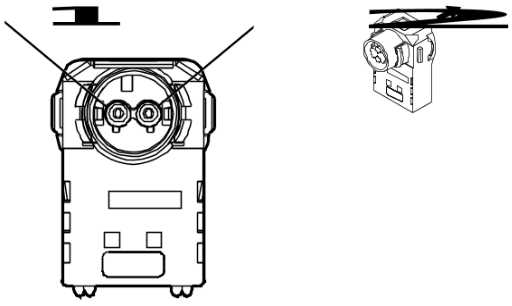
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

F106P Seat Side Air Bag - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GY	3066	Passenger Seat Side Air Bag High Control	I	—
2	0.5	BN / OG	3067	Passenger Seat Side Air Bag Low Control	I	—

F107 Steering Wheel Air Bag X1



4231869

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13596550
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.0 MAC Series(PK with YE Cover)

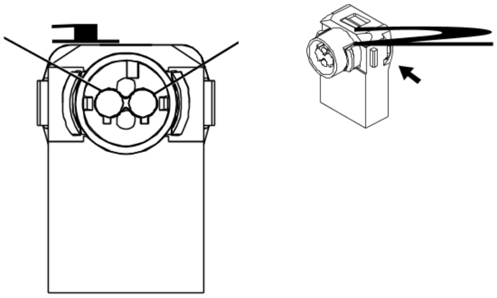
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F107 Steering Wheel Air Bag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / OG	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
2	—	OG / WH	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—

F107 Steering Wheel Air Bag X2



Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13596551
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.0 MAC Series(PU with YE Cover)

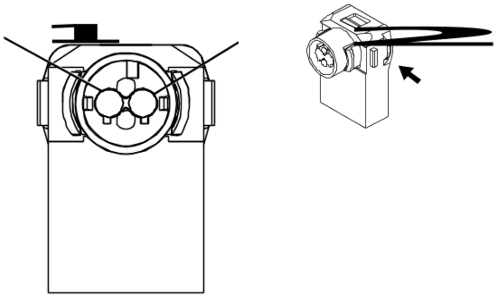
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

F107 Steering Wheel Air Bag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / OG	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
2	—	OG / VT	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—

F112D Seat Belt Retractor Pretensioner - Driver



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2 <p01>-Way F ABX-5 Series(PU with YE Cover)

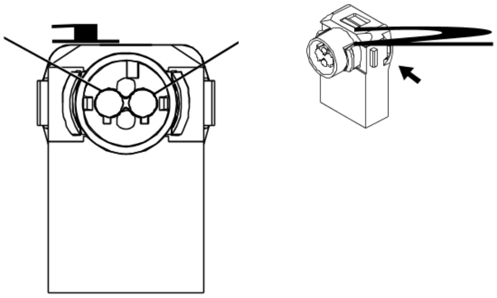
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F112D Seat Belt Retractor Pretensioner - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / WH	3477	Driver Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	GY / OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	—

F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2 <p01>-Way F ABX-5 Series(PU with YE Cover)

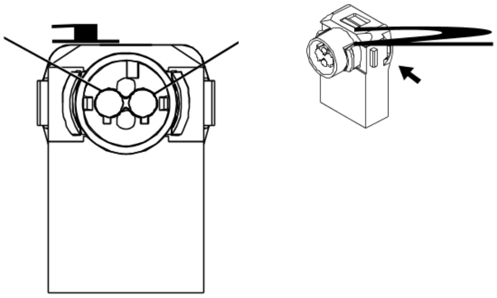
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	WH / OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	—

F112P Seat Belt Retractor Pretensioner - Passenger (Extended Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2 <p01>-Way F ABX-5 Series(PU with YE Cover)

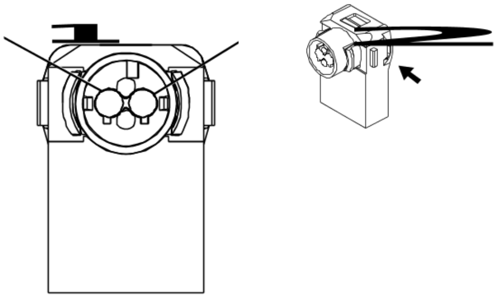
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F112P Seat Belt Retractor Pretensioner - Passenger (Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	WH / OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	—

F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2 <p01>-Way F ABX-5 Series(PU with YE Cover)

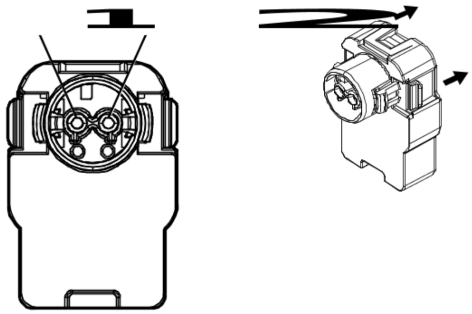
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	WH / OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	—

F113D Seat Belt Anchor Pretensioner - Driver



4823732

Connector Part Information

Harness Type: Body
OEM Connector: 1-1801930-1
Service Connector: 13530531
Description: 2 <p01>-Way F 1.0 Series(PK with YE Cover)

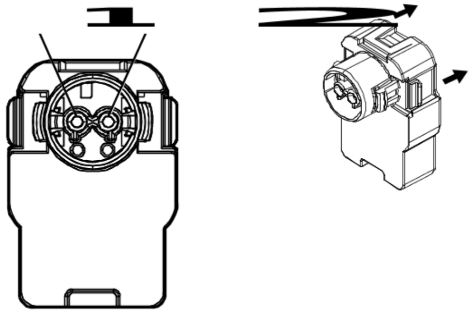
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F113D Seat Belt Anchor Pretensioner - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / YE	3481	Driver Seat Belt Anchor Pretensioner High Control	I	—
2	0.5	YE / OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	I	—

F113P Seat Belt Anchor Pretensioner - Passenger



4823732

Connector Part Information

Harness Type: Body
OEM Connector: 1-1801930-1
Service Connector: 13530531
Description: 2 <p01>-Way F 1.0 Series(PK with YE Cover)

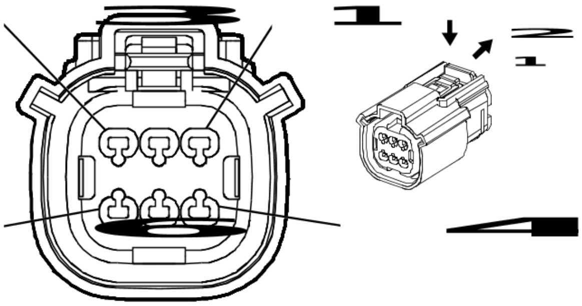
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

F113P Seat Belt Anchor Pretensioner - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	I	—
2	0.5	GY / OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	I	—

G5 Transmission Fluid Pump - Electric/Auxiliary (MQB)



4574736

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 160038-3009
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5 MX Series, Sealed(WH)

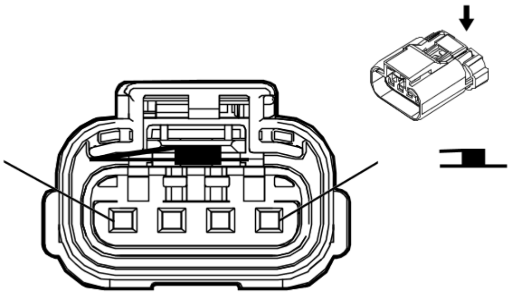
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

G5 Transmission Fluid Pump - Electric/Auxiliary (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / VT	8640	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
4	0.5	GY / OG	2968	Transmission Auxiliary Fluid Pump Control	I	—
5	—	—	—	Not Occupied	—	—
6	1.5	BK / YE	4450	Ground	I	—

G10L Cooling Fan Motor - Left (L3B)



Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

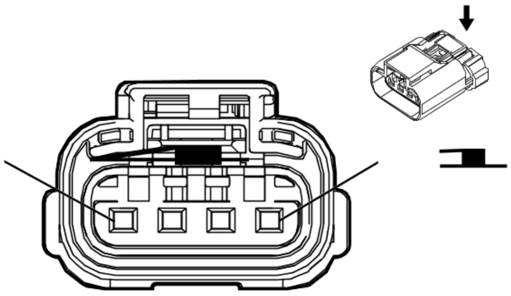
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10L Cooling Fan Motor - Left (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / WH	342	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10L Cooling Fan Motor - Left (L82)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

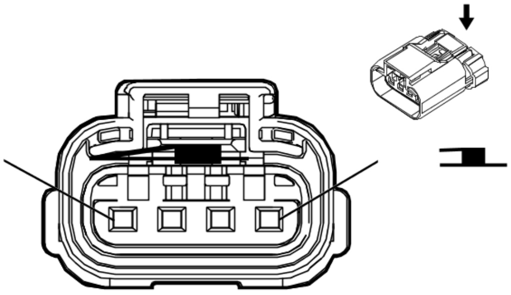
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10L Cooling Fan Motor - Left (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / WH	342	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10L Cooling Fan Motor - Left (L84/L87)



Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

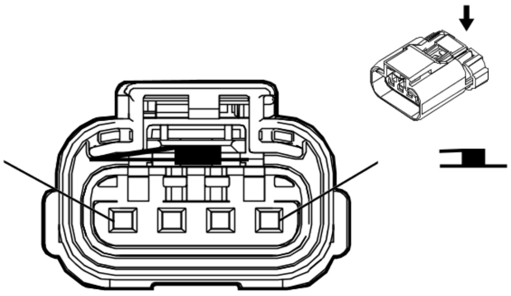
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

G10L Cooling Fan Motor - Left (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	I	—
2	5	RD / WH	342	Battery Positive Voltage	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10L Cooling Fan Motor - Left (LM2)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

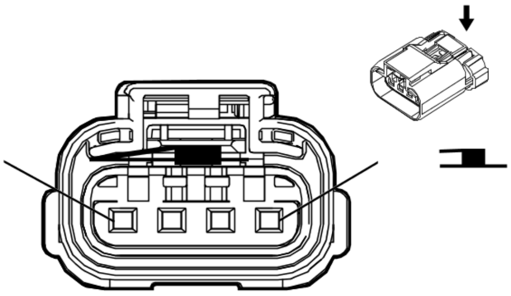
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10L Cooling Fan Motor - Left (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / WH	342	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10L Cooling Fan Motor - Left (LV3)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

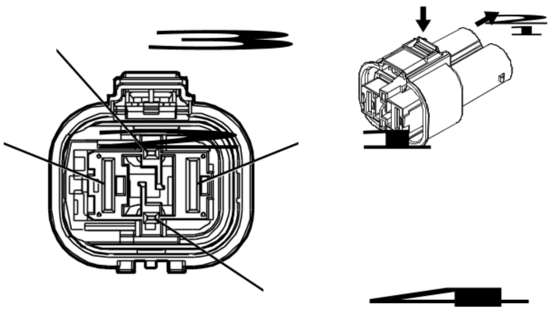
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10L Cooling Fan Motor - Left (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / WH	342	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10LW Cooling Fan Motor - Lower (L3B)



4847569

Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2, 9.5 MCON Series, Sealed(BK)

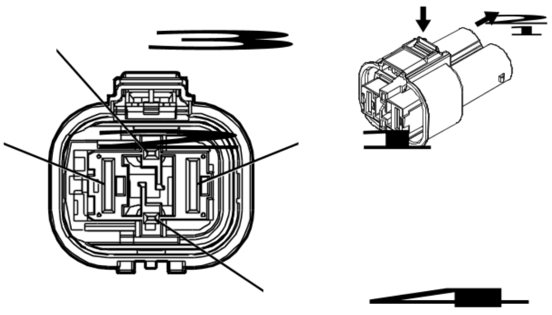
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-22 (RD)	No Tool Required

G10LW Cooling Fan Motor - Lower (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD / VT	842	Battery Positive Voltage	II	—
2	5	BK	4450	Ground	II	—
3	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	I	—
4	—	—	—	Not Occupied	—	—

G10LW Cooling Fan Motor - Lower (LM2)



4847569

Connector Part Information

Harness Type: Engine
OEM Connector: 4-2286732-1
Service Connector: 84766431
Description: 4 <p01>-Way F 1.2, 9.5 MCON Series, Sealed(BK)

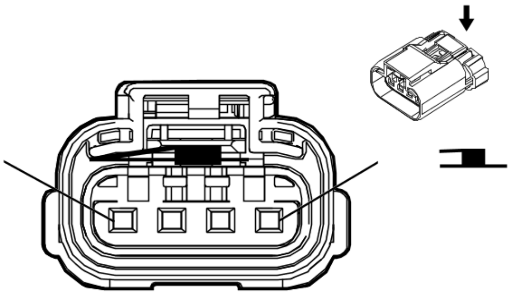
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-22 (RD)	No Tool Required

G10LW Cooling Fan Motor - Lower (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD / VT	842	Battery Positive Voltage	II	—
2	5	BK	4450	Ground	II	—
3	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	I	—
4	—	—	—	Not Occupied	—	—

G10R Cooling Fan Motor - Right (L3B)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

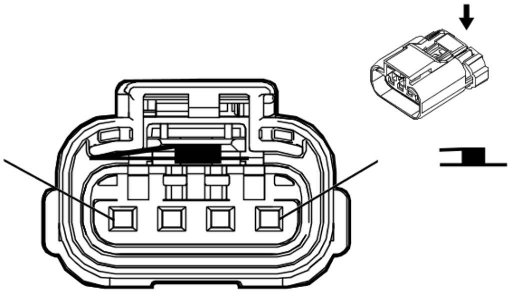
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10R Cooling Fan Motor - Right (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / GY	642	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10R Cooling Fan Motor - Right (L82)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

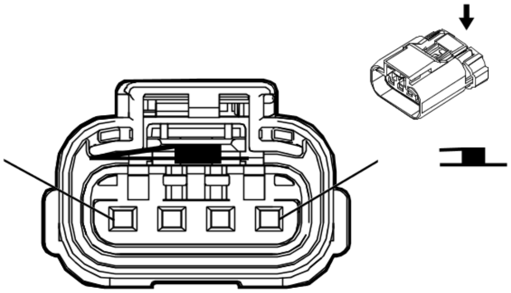
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10R Cooling Fan Motor - Right (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / GY	642	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10R Cooling Fan Motor - Right (L84/L87)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

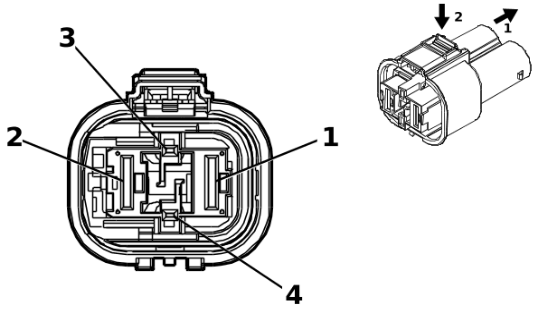
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

G10R Cooling Fan Motor - Right (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	I	—
2	5	RD / GY	642	Battery Positive Voltage	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10R Cooling Fan Motor - Right (LM2)



5187743

Connector Part Information

Harness Type: Engine
OEM Connector: 4-2286732-2
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2, 9.5 MCON Series(GY)

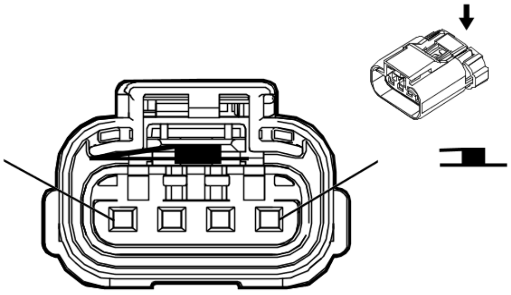
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-22 (RD)	No Tool Required

G10R Cooling Fan Motor - Right (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD	642	Battery Positive Voltage	II	—
2	8	BK	4450	Ground	II	—
3	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

G10R Cooling Fan Motor - Right (LV3)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 84625007
Description: 4 <p01>-Way F 2.8 APEX Series, Sealed(BK)

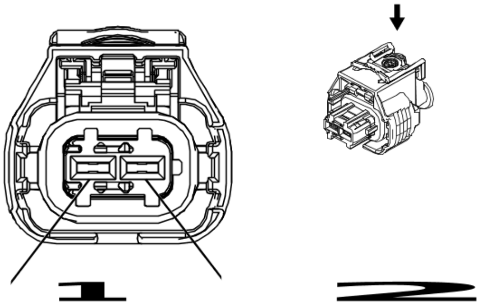
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10R Cooling Fan Motor - Right (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD / GY	642	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G13 Generator X1 (L3B)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

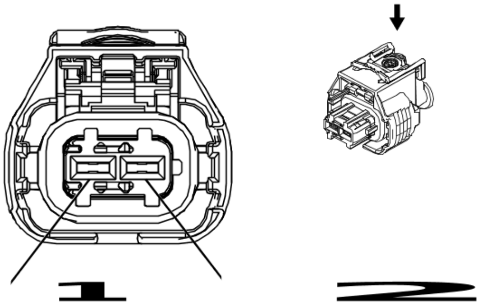
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (L82)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 1928405714
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

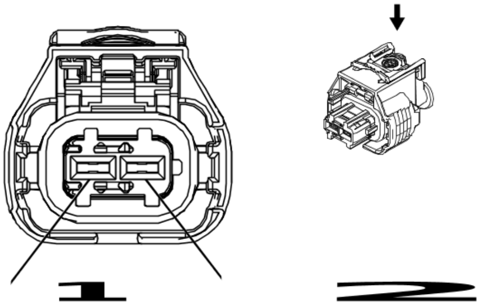
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (L84/L87)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 1928405714
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

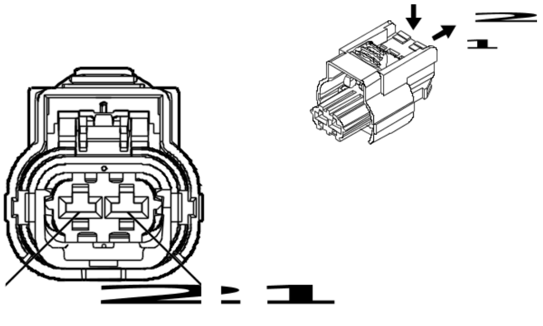
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (LM2)



4992524

Connector Part Information

Harness Type: Engine
OEM Connector: 35182447
Service Connector: 84941154
Description: 2 <p01>-Way F 2.8 CTS Series, Sealed(BK)

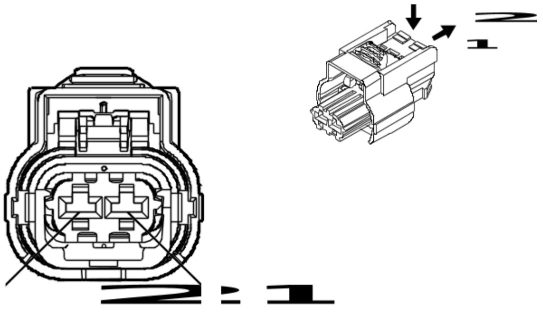
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (LV3)



4992524

Connector Part Information

Harness Type: Engine
OEM Connector: 35182447
Service Connector: 84941154
Description: 2 <p01>-Way F 2.8 CTS Series, Sealed(BK)

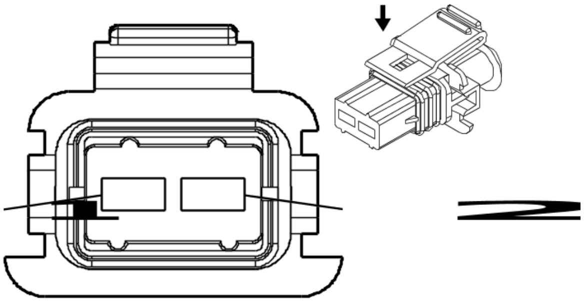
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (VYU)



1522871

Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 12186308
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F Junior Power Timer Series, Sealed(BK)

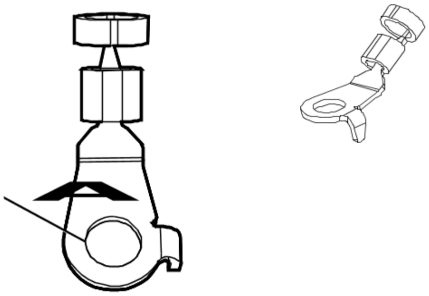
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (VYU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	9025	—	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X2



4565696

Connector Part Information

Harness Type: Generator
OEM Connector: 84238913
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way

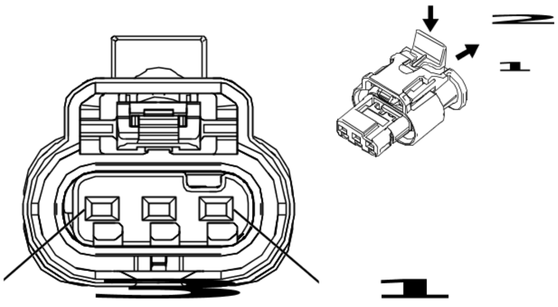
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	RD / YE	2	Battery Positive Voltage	I	—

G17 Heater Coolant Pump (L84/L87)



4249125

Connector Part Information

Harness Type: Engine
OEM Connector: 33176362
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCP Series, Sealed(BN)

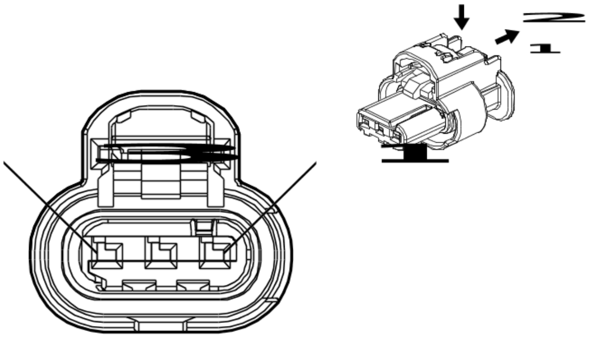
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

G17 Heater Coolant Pump (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	4450	Ground	I	—
2	0.5	YE / BU	5126	Coolant Pump Control	I	—
3	—	—	—	Not Occupied	—	—

G17 Heater Coolant Pump (LM2)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-1
Service Connector: 19371207
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

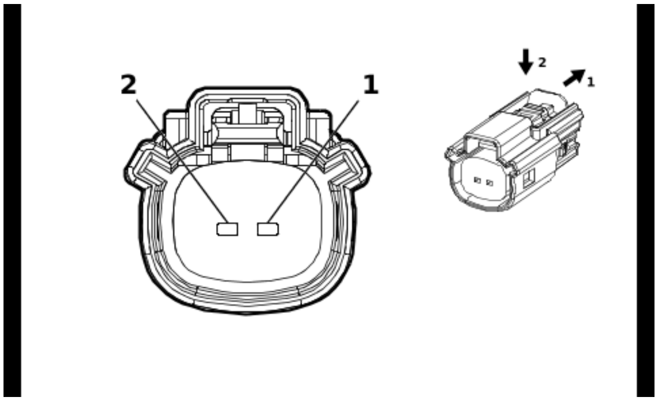
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

G17 Heater Coolant Pump (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	4450	Ground	I	—
2	0.5	YE / BU	5126	Coolant Pump Control	I	—
3	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G18 High Pressure Fuel Pump (L3B)



2474713

Connector Part Information

Harness Type: Engine
OEM Connector: 13782480
Service Connector: 13577534
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

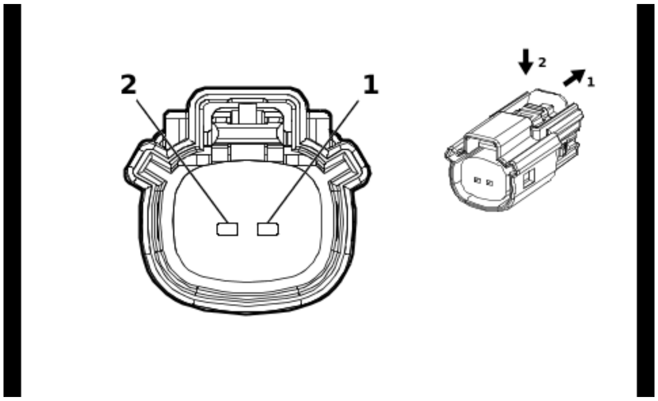
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

G18 High Pressure Fuel Pump (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	I	—
2	0.75	YE	7301	High Pressure Fuel Pump High Control	I	—

G18 High Pressure Fuel Pump (L82/L84/L87/LV3)



2474713

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

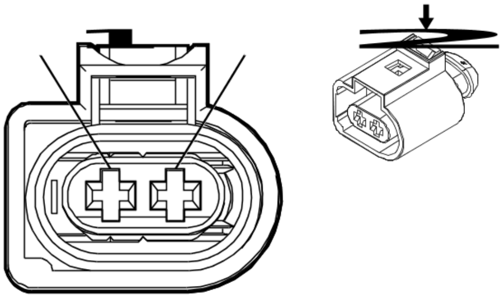
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

G18 High Pressure Fuel Pump (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	I	—
2	0.75	YE	7301	High Pressure Fuel Pump High Control	I	—

G24 Windshield Washer Pump



2474738

Connector Part Information

Harness Type: Body
OEM Connector: 10863916
Service Connector: 85005016
Description: 2 <p01>-Way F 2.8 MDK5 Series, Sealed(BK)

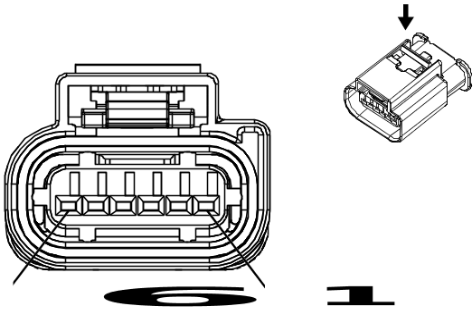
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

G24 Windshield Washer Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / VT	228	Windshield Washer Pump Control	I	—
2	0.5	BK	150	Ground	I	—

G58 Evaporative Emission Purge Pump (L3B)



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33225994
Service Connector: 19354437
Description: 6 <p01>-Way F 1.2 MCON Series, Sealed(BK)

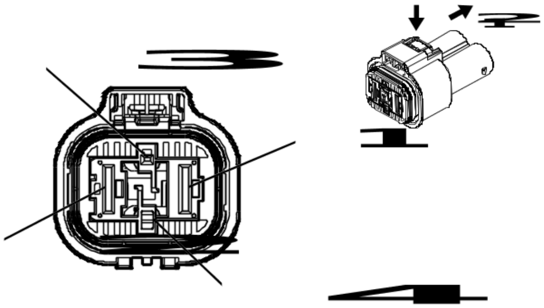
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

G58 Evaporative Emission Purge Pump (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / BU	2447	Evaporative Purge Pump Pressure Signal	I	—
2	0.75	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.75	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
4	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
5	0.75	BK	4450	Ground	I	—
6	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—

G59 Engine Coolant Pump (L3B)



4994735

Connector Part Information

Harness Type: Engine
OEM Connector: 33368755
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2, 9.5 MCON Series, Sealed(BK)

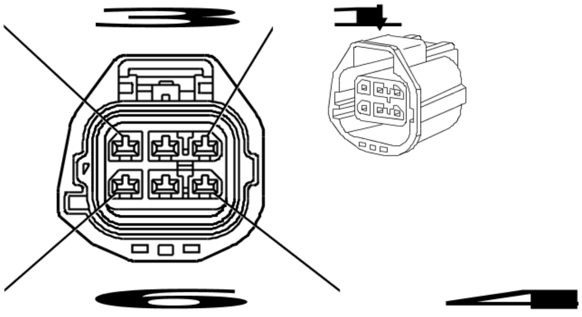
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-22 (RD)	No Tool Required

G59 Engine Coolant Pump (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD / BN	440	Battery Positive Voltage	II	—
2	10	BK	4450	Ground	II	—
3	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
4	—	—	—	Not Occupied	—	—

K4 Assist Step Control Module X1 (BRS)



1420587

Connector Part Information

Harness Type: Chassis
OEM Connector: 7287-9814-10
Service Connector: 19368306
Description: 6 <p01>-Way F 2.8 Series, Sealed(GY)

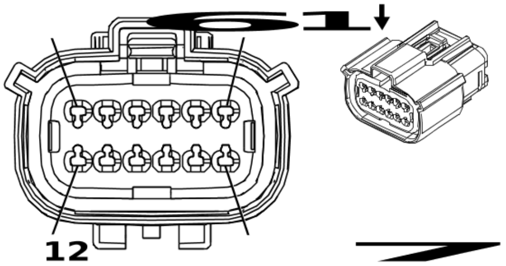
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

K4 Assist Step Control Module X1 (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	GN	7469	Right Left Running Board Step Motor Control Retract	I	—
2	2.5	BK	2150	Ground	I	—
3	2	WH / BN	7471	Left Running Board Step Motor Control Extend	I	—
4	2	BU	7470	Right Running Board Step Motor Control Extend	I	—
5	2.5	RD / YE	1142	Battery Positive Voltage	I	—
6	2	GY	7472	Left Running Board Step Motor Control Retract	I	—

K4 Assist Step Control Module X2 (BRS)



2424960

Connector Part Information

Harness Type: Chassis
OEM Connector: 33472-1290
Service Connector: 19352907
Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

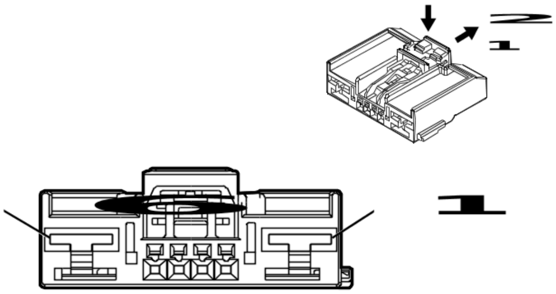
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217

K4 Assist Step Control Module X2 (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / RD	7468	Left Running Board Step Motor Hall Sensor 5V Reference	I	—
2	0.5	GN / RD	7464	Right Running Board Step Motor Hall Sensor 5V Reference	I	—
3	0.5	YE	7467	Left Running Board Step Motor Hall Sensor Signal	I	—
4	0.5	VT	7465	Right Running Board Step Motor Hall Sensor Signal	I	—
5	0.5	YE / BN	7466	Left Running Board Step Motor Hall Sensor Low Reference	I	—
6	0.5	YE / BK	7463	Right Running Board Step Motor Hall Sensor Low Reference	I	—
7	0.5	BK / BU	685	Running Board Step Kick Switch Feedback Signal	I	—
8	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	BN / WH	7462	Running Board Steps Disable Signal	I	—
11	0.5	BU / GN	4746	Running Board Step Left Kick Switch Signal	I	—
12	0.5	WH	4747	Running Board Step Right Kick Switch Signal	I	—

K8 Blower Motor Control Module X1



4650258

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 7289-7139-30
Service Connector: 19356432
Description: 6 <p01>-Way F 0.64, 6.3 Series(BK)

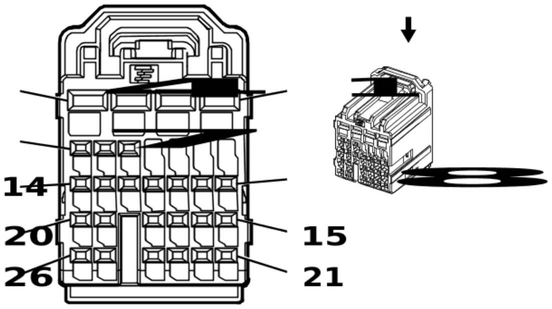
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

K8 Blower Motor Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD / VT	542	Battery Positive Voltage	I	—
2	0.35	BU / GY	754	Blower Motor Speed Control	II	—
3	0.35	GN / BU	761	Blower Speed Feedback Signal	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	4	BK	1050	Ground	I	—

K9 Body Control Module X1



2537268

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2098067-1
Service Connector: 13576031
Description: 26 <p01>-Way F 0.64, 2.8 Series(NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A
II	19354201	J-35616-35 (VT)	J-38125-553

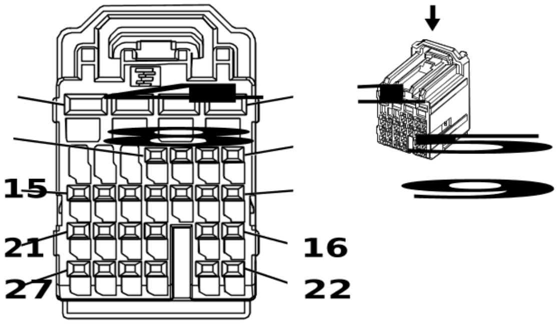
K9 Body Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1850	Ground	II	—
2	1	RD / BU	2540	Battery Positive Voltage	II	—
3	0.5	RD / GY	2140	Battery Positive Voltage	II	—
4	0.75	RD / BN	2240	Battery Positive Voltage	II	—
5	0.5	WH	6816	Indicator Dimming Control	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.35	BN / BK	5720	Ignition Mode Switch Accessory LED Signal	I	BTM
9	0.35	WH / BN	7555	Headlamp Switch Signal	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	GN / BN	306	Headlamp Switch Off Signal	I	—
12	0.35	BU	1111	Stop/Start Switch Signal	I	—
13	0.35	YE	7556	Headlamp Switch Reference	I	—
14	0.35	GY / GN	328	Interior Lamp Defeat Switch Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	WH / VT	103	Headlamp Switch On Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	BU / VT	5904	Steering Column Lock Status Signal	I	BTM
19	0.35	BK / BN	5360	Brake Apply Sensor Low Reference	I	—
20	0.35	BU / BK	5719	Ignition Mode Switch Start LED Signal	I	BTM
21	0.35	GY	728	Security Indicator Control	I	—
22	0.35	GN / GY	13	Headlamp Switch Park Lamp Signal	I	—

K9 Body Control Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.35	GY	157	Interior Lamp Control	I	—
24	0.35	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
25	0.35	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
26	0.35	BU / WH	3275	Remote Control Door Lock Receiver Receive Signal	I	—

K9 Body Control Module X2



2537269

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2098067-2
Service Connector: 13576032
Description: 27 <p01>-Way F 0.64, 2.8 Series(BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A
II	19354201	J-35616-35 (VT)	J-38125-553

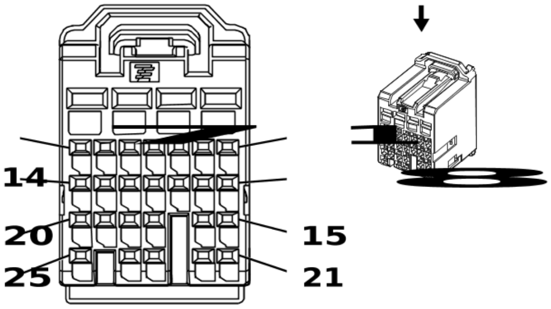
K9 Body Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	2740	Battery Positive Voltage	II	—
2	2.5	BK	1850	Ground	II	—
3	0.5	RD / BN	2940	Battery Positive Voltage	II	—
4	2.5	RD / VT	4040	Battery Positive Voltage	II	—
5	0.35	VT / GN	7558	Front Footwell Accent Lighting Control	I	—
6	0.35	GN	1110	Stop/Start Indicator Control	I	KL9
7	0.35	BU / YE	5361	Brake Apply Sensor Signal	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.35	WH / BU	278	Ambient Light Sensor Signal	I	—
11	0.35	YE / BU	7295	Left Minor Endgate Ajar Signal	I	QK2
12	0.35	WH / BN	7296	Right Minor Endgate Ajar Signal	I	QK2
13	0.35	WH	5359	Brake Apply Sensor Control	I	—
14	0.35	BU / VT	1788	Traction Control Switch Signal 1	I	—
15	0.35	GY / WH	7176	All Windows Open Switch Signal	I	WLD
16	0.35	GY	3273	Remote Control Door Lock Receiver Low Reference	I	—
17	0.35	BU / GN	5723	Ignition Mode Switch Mode Voltage	I	BTM
18	0.35	GY	158	Cargo Lamp Switch Signal	I	UF2
19	0.35	WH / GY	2935	Task Lamp Switch Signal	I	U12
20	0.5	WH / BU	3691	Trailer Brake Apply Signal	I	(Z82/ 8S3) - JL1
21	0.5	GN / GY	6135	Body Control Module LIN Bus 4	I	AEQ

K9 Body Control Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.35	GY / WH	3272	Remote Control Door Lock Receiver Control	I	—
26	0.35	GN / WH	111	Hazard Warning Switch Signal	I	—
27	0.35	YE / GN	3274	Remote Control Door Lock Receiver Transmit Signal	I	—

K9 Body Control Module X3



2537274

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2098067-7
Service Connector: 13576037
Description: 25 <p01>-Way F 0.64, 2.8 Series(GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A

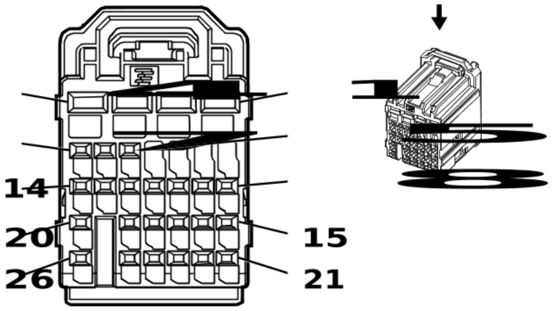
K9 Body Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.5	GN / GY GN / GY	3277 3277	Vehicle Anti-Theft System Immobilizer Low Reference Vehicle Anti-Theft System Immobilizer Low Reference	I I	BTM - BTM
2	0.35 0.5	GN / VT GN / VT	7533 7533	Immobilizer LIN Bus 1 Immobilizer LIN Bus 1	I I	BTM - BTM
3	0.35 0.5	GY / BK GY / BK	3276 3276	Immobilizer Control Module Control Immobilizer Control Module Control	I I	BTM - BTM
4	0.35	WH / RD	1444	12V Reference	I	—
5	0.35	VT / YE	4	Accessory Ignition Voltage	I	—
6	0.35	VT / BK	3	Run/Crank Ignition 1 Voltage	I	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.35	BN / GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
10	0.5	BK / GY	6009	Windshield Wiper Switch Low Reference	I	—
11	0.5	WH	524	High Beam Select Switch High Beam Signal	I	—
12	0.5	WH / GN	663	Hazard Switch Left Turn Signal	I	—
13	0.5	YE / BU	1714	Windshield Wiper Switch Low Signal	I	—
14	0.5	WH / GY	3849	Automatic High Beam On/Off Switch Signal	I	—
15	0.35	WH / VT	1020	Off/Run/Crank Ignition Voltage	I	—
16	0.35	GY / GN	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
17	0.5	YE / BN	307	Headlamp Switch Flash Signal	I	—
18	0.35	GN / WH	3287	Horn Switch Signal	I	—

K9 Body Control Module X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	0.35	GN / WH	4115	Body Control Module LIN Bus 5	I	—
20	0.5	GY	1715	Windshield Wiper Switch High Signal	I	—
21	0.5	VT / YE	5526	Tap Up/Tap Down Switch Signal	I	—
22	0.35	WH / BK	1073	Ignition Key Resistor Signal	I	- BTM
23	0.35	GN	4512	Wireless Charging System Charge Indicator Control	I	K4C
24	0.5	VT / BU	664	Hazard Switch Right Turn Signal	I	—
25	0.35	WH / BK	94	Windshield Washer Switch Signal	I	—

K9 Body Control Module X4



2537270

Connector Part Information

Harness Type: Body
OEM Connector: 13826914
Service Connector: 13576033
Description: 26 <p01>-Way F 0.64, 2.8 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A
II	19354201	J-35616-35 (VT)	J-38125-553

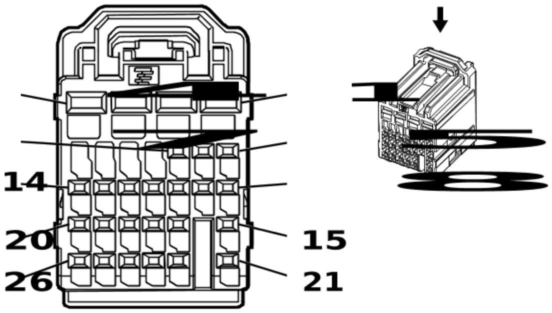
K9 Body Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	712	Left Headlamp Low Beam Control	II	—
2	1	YE	312	Right Headlamp Low Beam Control	II	—
3	0.5 0.35	GN / VT GN / VT	1315 1315	Right Front Turn Signal Lamp Control Right Front Turn Signal Lamp Control	II	— DPO/ DQS
4	1	BN / GN	19	Right Rear Stop/Turn Signal Lamp Control	II	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	GY / BU	7538	Left Front DRL Control	I	—
8	0.35	VT / GY	1630	Steering Column Key Cylinder Lock Solenoid Actuator Control	I	- BTM
9	0.35	WH / VT	968	Right Front Cargo Lamp Control	I	DPO/ DQS
10	—	—	—	Not Occupied	—	—
11	0.35	VT / WH	5065	Stop Lamp Relay Coil Control	I	—
12	0.35	GY / VT	755	Retained Accessory Power Relay Coil Control	I	- BTM
13	0.35	GN / YE	6846	Rear License Plate Lamp Control	I	—
14	0.35	BN / GY	2268	Windshield Washer Relay Control	I	—
15	0.35	GN / VT	5199	Run/Crank Relay Coil Control	I	—
16	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	—
17	0.35	BN / GN	196	Windshield Wiper Motor Park Switch Signal	I	—
18	0.35 0.35	WH / YE GN / BU	5075 761	Current Sensor Signal Blower Speed Feedback Signal	I I	- KL9 L3B/ LM2/ C32

K9 Body Control Module X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	0.35 0.35	BU / YE BU / YE	6844 7176	ABS/Traction Control Hill Descent Control Switch Signal All Windows Open Switch Signal	I I	JHD WLD
20	0.75	RD / YE	2340	Battery Positive Voltage	I	—
21	0.35	BU / VT	5076	Current Sensor Voltage Reference	I	- KL9
22	0.35	VT / YE	5985	Accessory Wake-Up Serial Data	I	—
23	0.35	WH / BU	5986	Serial Data Communication Enable	I	—
24	0.35	BN / GN	4064	Hood Status B Signal	I	—
25	0.35	YE / BU	4086	Ignition Mode Switch Challenge Active Signal	I	BTM
26	0.75	BK / WH	2351	Signal Ground	I	—

K9 Body Control Module X5



2537271

Connector Part Information

Harness Type: Body
OEM Connector: 13826916
Service Connector: 13576034
Description: 26 <p01>-Way F 0.64, 2.8 Series(BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A
II	19354201	J-35616-35 (VT)	J-38125-553

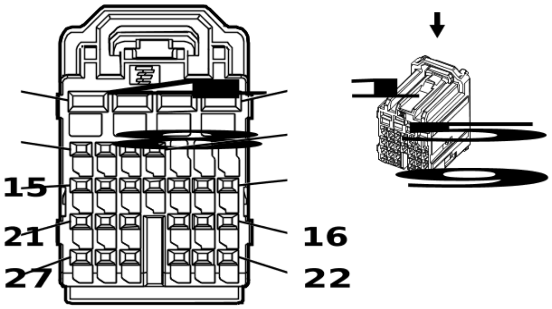
K9 Body Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE / BU	18	Left Rear Stop/Turn Signal Lamp Control	II	—
2	0.5 0.35	BU / WH BU / WH	1314 1314	Left Front Turn Signal Lamp Control Left Front Turn Signal Lamp Control	II	— DPO/ DQS
3	0.5	RD / GN	5140	Battery Positive Voltage	II	—
4	0.5	RD / WH	3440	Battery Positive Voltage	II	—
5	—	—	—	Not Occupied	—	—
6	0.35	BK / VT	5077	Current Sensor Low Reference	I	- KL9
7	0.35	BU / BN	7539	Right Front DRL Control	I	—
8	0.5	BU / WH	5186	Left Trailer Turn Signal Lamp Control	I	—
9	0.75	BU / VT	7729	Major Endgate Low Relay Control	I	QT5
10	0.5	BN / WH	1317	Fog Lamp Relay Control	I	S3U/ T3U
11	0.75	WH / GN	7728	Major Endgate High Relay Control	I	QT5
12	0.35	WH / BU	6311	Cruise/ETC/TCC Brake Signal	I	—
13	0.35	YE	6812	Out of Park Signal	I	—
14	0.35	VT / BN	300	Run Ignition 3 Voltage	I	NP0/ NQH
15	0.35	BU / GY	4672	Dome Lamp Off Indicator Control	I	—
16	—	—	—	Not Occupied	—	—
17	0.5	YE / GY	5187	Right Trailer Turn Signal Lamp Control	I	—
18	0.35	BN / VT	1969	Headlamp High Beam Relay Control	I	—
19	0.35	BN / WH	28	Horn Relay Control	I	—
20	0.35	YE	7755	AC Power Outlet Status Indicator Control	I	KI4/ KI5

K9 Body Control Module X5 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.5	YE / BN	2229	Left Headlamp Relay Control	I	—
22	0.35	BU	45	Park Lamp Relay Control	I	—
23	—	—	—	Not Occupied	—	—
24	0.35	WH / VT	860	Windshield Wiper Switch High Signal	I	—
25	0.35	BN	7754	AC Power Outlet Enable Signal	I	KI4/ KI5
26	0.35	BU / BN	38	Backup Lamp Relay Control	I	—

K9 Body Control Module X6



2537272

Connector Part Information

Harness Type: Body
OEM Connector: 13826917
Service Connector: 13576035
Description: 27 <p01>-Way F 0.64, 2.8 Series(PK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A
II	19354201	J-35616-35 (VT)	J-38125-553

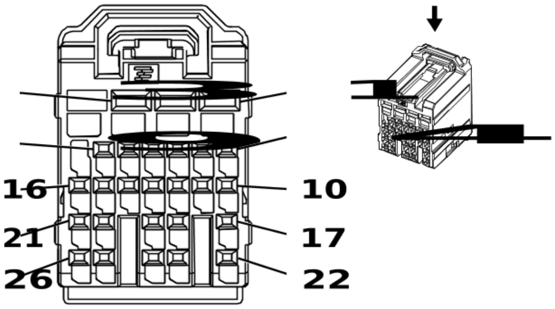
K9 Body Control Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	5911	Door Lock Actuator Lock Control 2	II	—
2	0.75	GY	295	Door Lock Actuator Lock Control	II	—
3	1.5	BK	1150	Ground	II	—
4	0.75	BN / YE	294	Door Lock Actuator Unlock Control	II	—
5	0.35	BN	7291	Major Endgate Release Switch Signal Interior	I	QT5
6	0.35	BU / VT	1124	Door Lock Key Switch Unlock Signal	I	- AXG
7	0.75	WH / GY	7297	Minor Endgate High Relay Control	II	QK2+ QT5
8	—	—	—	Not Occupied	—	—
9	0.35	GN / BU	6133	Body Control Module LIN Bus 2	I	KA1/ KQV
10	0.35	GN / YE	6134	Body Control Module LIN Bus 3	I	AXG/ AED/ AEF
11	—	—	—	Not Occupied	—	—
12	0.35	YE / BK	5356	Left Tail Lamp Outage Detection Signal	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	GY	7292	Major Endgate Release Switch Signal Exterior	I	QT5
15	0.35	YE	7294	Minor Endgate Release Switch Discrete Signal Exterior	I	QT5
16	0.5	GN / BN	6132	Body Control Module LIN Bus 1	I	CF5
17 - 20	—	—	—	Not Occupied	—	—
21	0.35	WH / VT	6821	Surveillance Switch Signal	I	9L7
22	0.35	VT / YE	5357	Right Tail Lamp Outage Detection Signal	I	—
23	—	—	—	Not Occupied	—	—

K9 Body Control Module X6 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
25	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
26	0.35	BN / WH	1429	Standing Lamp Relay Control	I	UF2
27	0.35	BN / WH	781	Driver Door Lock Switch Unlock Signal	I	AU3

K9 Body Control Module X7



2537273

Connector Part Information

Harness Type: Body
OEM Connector: 13826915
Service Connector: 13576036
Description: 26 <p01>-Way F 0.64, 2.8 Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13582298	J-35616-64B (LT BU)	J-38125-215A
II	19354201	J-35616-35 (VT)	J-38125-553

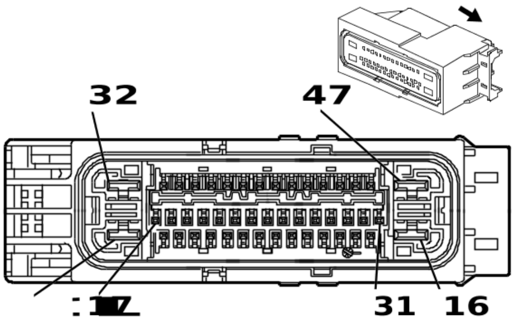
K9 Body Control Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	WH / BN	6815	Inadvertent Load Control	II	—
4	0.5	GY / BU	7762	Cargo Lamp Control	I	UF2
5	0.35	BU	2082	Puddle Lamp Control	I	DEZ/ DLF/ DQS
6	0.35	YE / WH	816	Brake Transmission Shift Interlock Solenoid Actuator Control	I	—
7	0.75	GY / BU	7298	Minor Endgate Low Relay Control	II	QK2
8	0.35	GY / GN	5996	Driver Outside Rearview Mirror Courtesy Lamp Control	I	DEZ
9	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	BN / YE	780	Driver Door Lock Switch Lock Signal	I	AU3
12	0.35	BN	4511	Wireless Charging System Fault Indicator Control	I	K4C
13	0.35	GN / WH	1932	Shift Select Switch Park Signal	I	—
14	0.35 0.35	GY WH / BU	746 7545	Right Front Door Ajar Switch Signal Right Front Turn Signal Lamp Feedback Signal	I I	A6R GFD/ GFG/ GFU/ GFW
15	0.35	BU / GY	553	Shift Select Switch Performance Signal	I	—
16	0.5	WH / BU	3691	Trailer Brake Apply Signal	I	(Z82/ 8S3) - JL1
17	0.35	BU	2082	Puddle Lamp Control	I	DEZ/ DLF/ DQS

K9 Body Control Module X7 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	—	—	—	Not Occupied	—	—
19	0.35	GY	156	Courtesy Lamp Switch Signal	I	—
20	—	—	—	Not Occupied	—	—
21	0.35	YE / VT	244	Passenger Door Lock Switch Lock Control	I	—
22	0.35	WH / YE	7557	Interior Door Handle Accent Lighting Control	I	AU3
23	—	—	—	Not Occupied	—	—
24	0.35	BN / VT	245	Passenger Door Lock Switch Unlock Control	I	AU3
25	0.35 0.35	GY BU / VT	745 6568	Left Front Door Ajar Switch Signal Front Turn Signal Lamp Feedback Signal	I I	AEQ GFD/ GFG/ GFU/ GFW
26	—	—	—	Not Occupied	—	—

K19 Suspension Control Module (Z45)



1830966

Connector Part Information

Harness Type: Chassis
OEM Connector: ASGPB-47L1A-K
Service Connector: 19168025
Description: 47 <p01>-Way F 0.64, 6.3 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13578883	J-35616-64B (LT BU)	J-38125-215A
II	13580835	J-35616-42 (RD)	J-38125-215A

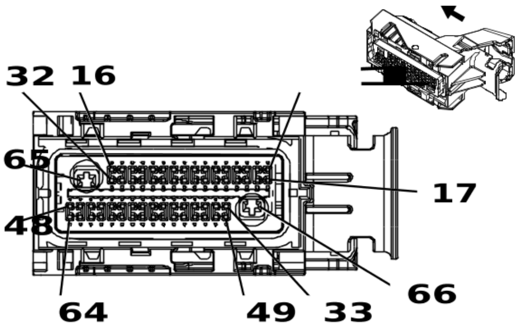
K19 Suspension Control Module (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BK	1750	Ground	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / BU	1206	Left Front Suspension Position Sensor Low Reference	I	—
4	0.5	BK / GY	1212	Right Front Suspension Position Sensor Low Reference	I	—
5	0.5	BK / GN	1209	Left Rear Suspension Position Sensor Low Reference	I	—
6 - 9	—	—	—	Not Occupied	—	—
10	0.5	BU / RD	1205	Left Front Suspension Position Sensor Voltage Reference	I	—
11	0.5	BN / RD	1211	Right Front Suspension Position Sensor Voltage Reference	I	—
12	0.5	YE / RD	1208	Left Rear Suspension Position Sensor Voltage Reference	I	—
13 - 15	—	—	—	Not Occupied	—	—
16	2	YE / WH	1213	Right Front Suspension Position Sensor Signal	II	—
17	—	—	—	Not Occupied	—	—
18	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
19	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
20	0.5	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
21	0.5	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
22 - 24	—	—	—	Not Occupied	—	—

K19 Suspension Control Module (Z45) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.5	GN / WH	1210	Left Rear Suspension Position Sensor Signal	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
28	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
29	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
30	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
31	—	—	—	Not Occupied	—	—
32	2	RD / GN	2440	Battery Positive Voltage	II	—
33	0.75	GN / GY	1119	Right Rear Shock Absorber Actuator Control	I	—
34	0.75	BN / GN	1118	Right Rear Shock Absorber Actuator Control	I	—
35	0.75	BU / GY	1114	Left Rear Shock Absorber Actuator Control	I	—
36	0.75	GN / VT	1115	Left Rear Shock Absorber Actuator Control	I	—
37 - 38	—	—	—	Not Occupied	—	—
39	0.5	WH / BU	5986	Serial Data Communication Enable	I	—
40	—	—	—	Not Occupied	—	—
41	0.5	BN / WH	1207	Left Front Suspension Position Sensor Signal	I	—
42	—	—	—	Not Occupied	—	—
43	0.75	GY / BU	1113	Left Front Shock Absorber Actuator Control	I	—
44	0.75	BN / WH	1107	Left Front Shock Absorber Actuator Control	I	—
45	0.75	BN / BU	1116	Right Front Shock Absorber Actuator Control	I	—
46	0.75	GY / WH	1117	Right Front Shock Absorber Actuator Control	I	—
47	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L3B)



4504420

Connector Part Information

Harness Type: Engine
OEM Connector: 35195642
Service Connector: 19330900
Description: 66 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

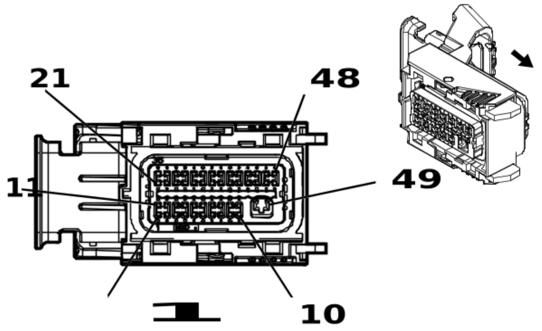
K20 Engine Control Module X1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	5991	Powertrain Relay Coil Control	II	—
2	0.5	YE / BK	625	Starter Enable Relay Control	II	—
3	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	VT / GY	3615	Step Cam A Control	II	—
7	0.5	GN / BK	3616	Step Cam B Control	II	—
8	0.5	BU	3584	Camshaft Position Motor Control A	II	—
9	0.5	GN	3585	Camshaft Position Motor Control B	II	—
10	0.5	YE / BU	3587	Camshaft Position Motor Control D	II	—
11	0.5	GY	3586	Camshaft Position Motor Control C	II	—
12	0.5	BU / WH	3589	Camshaft Position Motor Position Sensor 1 Signal	II	—
13	0.5	GN / WH	3592	Camshaft Position Motor Position Sensor 2 Signal	II	—
14	0.5	WH	924	—	II	—
15	0.5	WH / BU	6311	Cruise/ETC/TCC Brake Signal	II	—
16	0.5	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
17	0.75	GN / GY	465	Fuel Pump Primary Relay Control	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19	0.5	BN / WH	419	Check Engine Indicator Control	II	—
20 - 21	—	—	—	Not Occupied	—	—
22	0.5	BN / GN	927	—	II	—

K20 Engine Control Module X1 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.5	BU	926	—	II	—
24	0.5	YE / VT	6265	Camshaft Exhaust Stepper Cylinder 2 Rear Solenoid Control	II	—
25	0.5	VT / BK	6264	Camshaft Exhaust Stepper Cylinder 2 Front Solenoid Control	II	—
26	0.5	GY / BN	6262	Camshaft Exhaust Stepper Cylinder 3 Rear Solenoid Control	II	—
27	0.5	GN / BN	6261	Camshaft Exhaust Stepper Cylinder 3 Front Solenoid Control	II	—
28	0.5	BU / BK	928	—	II	—
29	0.5	BU	932	—	II	—
30	0.5	GY / BN	933	—	II	—
31	—	—	—	Not Occupied	—	—
32	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
33	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	II	—
34	0.5	YE / WH	3746	Camshaft Exhaust Lobe Axial Position Signal 1	II	—
35	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	II	—
36	0.5	YE / GN	3747	Camshaft Exhaust Lobe Axial Position Signal 2	II	—
37	0.5	YE	4063	Hood Status A Signal	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40 - 41	—	—	—	Not Occupied	—	—
42	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	II	—
43 - 44	—	—	—	Not Occupied	—	—
45	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	II	—
46	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	II	—
47	0.5	GN / WH	492	Mass Air Flow Sensor Signal	II	—
48	0.5	RD / BN	440	Battery Positive Voltage	II	—
49	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
50	0.5	VT / WH	3744	Camshaft Intake Lobe Axial Position Signal 1	II	—
51	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
52	0.5	VT / GN	3745	Camshaft Intake Lobe Axial Position Signal 2	II	—
53	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
54	0.5	BN	4645	Heater Core Outlet Temperature Signal	II	—
55	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
56	0.5	WH / GN	5380	Brake Position Sensor Signal	II	—
57	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
58	—	—	—	Not Occupied	—	—
59	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
60	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
61	—	—	—	Not Occupied	—	—
62	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
63	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	II	—
64	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	II	—
65	2	BK / WH	451	Signal Ground	I	—
66	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (L3B)



4596458

Connector Part Information

Harness Type: Engine
OEM Connector: 33303656
Service Connector: 19355678
Description: 49 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

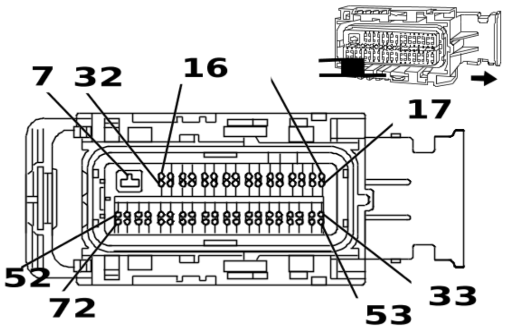
K20 Engine Control Module X2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
2	0.75	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	II	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	BN / BU	2447	Evaporative Purge Pump Pressure Signal	II	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
10	0.5	BK / BU	2979	Coolant Diverter Valve Position Sensor Low Reference	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	II	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.5	GN / YE	3337	Transmission Internal Mode Switch Mode Control Y	II	—
16	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
17	0.5	WH / VT	4108	Driver Mode Switch Signal	II	—
18	—	—	—	Not Occupied	—	—
19	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	II	—
20	0.5	WH	2590	Turbocharger Wastegate Motor Feedback Signal	II	—
21	—	—	—	Not Occupied	—	—
22	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	II	—
23	0.5	VT	7485	Engine Oil Temperature Sensor 2 Signal	II	—

K20 Engine Control Module X2 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BN / BU	357	Oil Temperature Sensor Signal	II	—
25	0.5	YE	2596	Turbocharger Inlet Absolute Pressure Sensor Signal	II	—
26 - 30	—	—	—	Not Occupied	—	—
31	0.75	YE / GY	6936	HO2S Signal	II	—
32	0.75	BN	6934	HO2S Ground	II	—
33	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	II	—
34	0.75	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	II	—
37	0.5	YE / BK	3000	Coolant Temperature Sensor 2 Signal	II	—
38	0.5	BN / GY	4644	Heater Core Inlet Temperature Signal	II	—
39	—	—	—	Not Occupied	—	—
40	0.5	GY / VT	2404	Engine Block Coolant Temperature Signal	II	—
41 - 44	—	—	—	Not Occupied	—	—
45	0.75	GN	6935	HO2S Pump Current Trim Signal	II	—
46	0.75	BN / WH	6933	HO2S Pump Current Signal	II	—
47	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
48	0.5	GN / WH	4622	Engine Control Module LIN Bus 2	II	—
49	2	BK / WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (L3B)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 19333091
Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

K20 Engine Control Module X3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN	3060	Turbocharger Bypass Solenoid Valve Control Bank 1	II	—
3	0.5	BN	25	Charge Indicator Control	II	—
4	0.5	VT / BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
5	—	—	—	Not Occupied	—	—
6	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	II	—
7	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	II	—
8	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	II	—
9	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	II	—
10	0.75	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	II	—
11	0.75	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	II	—
12	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	II	—
13	0.5	GY / BU	5282	Exhaust Camshaft Position Actuator Solenoid Valve 1	II	—
14	0.75	BU	2976	Coolant Diverter Valve Actuator Control Open	II	—
15	0.75	WH / BN	2591	Turbocharger Wastegate Motor Open Control	II	—
16	0.75	WH / BU	2592	Turbocharger Wastegate Motor Close Control	II	—
17 - 20	—	—	—	Not Occupied	—	—
21	0.75	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
22	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	II	—

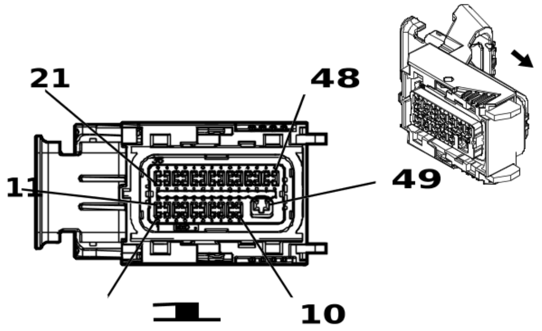
K20 Engine Control Module X3 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	II	—
24	0.5	YE / BU	2408	Engine Inlet Coolant Temperature Signal	II	—
25	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	II	—
26	0.5	BN	7348	Intake Air Temperature Sensor 2 Signal	II	—
27	0.5	BN	906	—	II	—
28	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	II	—
29	0.5	BK / VT	6754	Camshaft Position Actuator Solenoid Valve X Low Reference	II	—
30	0.5	YE	581	Throttle Actuator Open Control	II	—
31	0.5	BN / WH	582	Throttle Actuator Close Control	II	—
32	0.75	BU / BN	2977	Coolant Diverter Valve Actuator Control Close	II	—
33	0.5	VT / GY	496	Knock Sensor 1 Signal	II	—
34	0.5	WH / GY	1876	Knock Sensor 2 Signal	II	—
35	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	II	—
36	0.75	GN / BU	428	EVAP Canister Purge Solenoid Control	II	—
37 - 38	—	—	—	Not Occupied	—	—
39	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	II	—
40	0.5	BK / GY	5296	Exhaust Camshaft Position Sensor Low Reference 1	II	—
41	—	—	—	Not Occupied	—	—
42	0.5	VT / BK	5273	Exhaust Camshaft Position Sensor 1	II	—
43	0.5	GN	6271	Crankshaft Position Sensor Signal	II	—
44	0.5	YE / BU	2124	Ignition Control 4	II	—
45	0.5	BU / WH	2122	Ignition Control 2	II	—
46	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	II	—
47	0.75	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	II	—
48	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	II	—
49	0.75	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
50	0.75	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
51	0.75	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
52	0.75	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
53	0.5	BK / YE	1716	Knock Sensor Low Reference 1	II	—
54	0.5	BK / GY	2303	Knock Sensor Low Reference 2	II	—
55	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	—
56	0.5	YE / BN	106	Oil Pump Motor Control	II	—
57	0.5	BU	179	Engine Oil Pump Control	II	—
58	—	—	—	Not Occupied	—	—
59	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	II	—
60	0.5	GY / YE	5297	Exhaust Camshaft Position Sensor 1 Voltage Reference	II	—

K20 Engine Control Module X3 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
61	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	II	—
64	0.5	BU / VT	2121	Ignition Control 1	II	—
65	0.5	GN / BU	2123	Ignition Control 3	II	—
66	—	—	—	Not Occupied	—	—
67	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	II	—
68	0.75	YE	7301	High Pressure Fuel Pump High Control	II	—
69	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
70	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
71	0.75	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
72	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
73	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X1 (L82)



4596458

Connector Part Information

Harness Type: Engine
OEM Connector: 34576-0303
Service Connector: 19368142
Description: 49 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

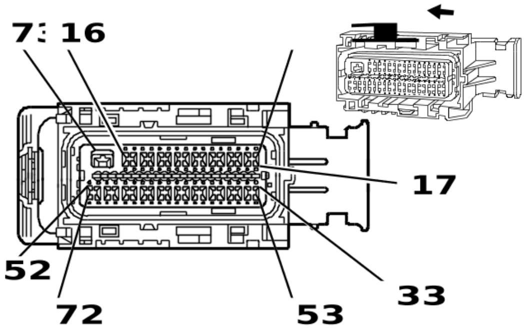
K20 Engine Control Module X1 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	II	—
6	0.5	WH / BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
8	0.5	BN / WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	II	—
14	0.5	WH / GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	II	—
16	0.5	WH / GY	1786	Transmission Park/Neutral Signal 1	II	—
17	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	GN / BU	428	EVAP Canister Purge Solenoid Control	II	—
22	—	—	—	Not Occupied	—	—
23	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	II	—

K20 Engine Control Module X1 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BN / GN	1174	Oil Level Switch Signal	II	—
29	—	—	—	Not Occupied	—	—
30	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
33	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
34	0.5	RD / BN	440	Battery Positive Voltage	II	—
35	0.5	VT / YE	3854	Cabin Heater Coolant Pump Motor Control	II	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42	0.5	WH	1579	Fuel Temperature/Composition Signal	II	—
43	—	—	—	Not Occupied	—	—
44	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	0.5	YE	4063	Hood Status A Signal	II	—
47	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
49	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (L82)



1673472

Connector Part Information

Harness Type: Engine
OEM Connector: 34566-0103
Service Connector: 19333090
Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

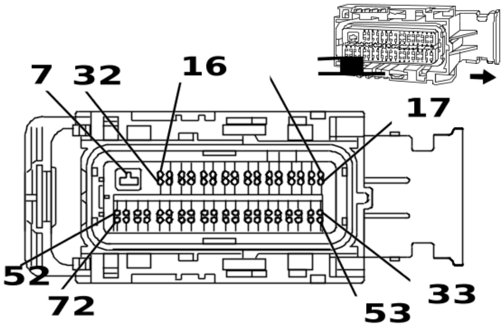
K20 Engine Control Module X2 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN / WH	4622	Engine Control Module LIN Bus 2	II	—
8	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	II	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	II	—
12	0.5	YE / BU	2124	Ignition Control 4	II	—
13	0.5	BN / BU	2126	Ignition Control 6	II	—
14	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
15	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
16	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
18 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	II	—
22 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	II	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	II	—
28	0.5	GN / BU	2123	Ignition Control 3	II	—

K20 Engine Control Module X2 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	0.5	BU / GY	2125	Ignition Control 5	II	—
30	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	II	—
31	0.5	BN	5496	Cylinder Deactivation Solenoid Valve Control 6	II	- YK9
32	0.5	YE / BN	2496	Cylinder Shutoff Solenoid Enable Signal 6	II	- YK9
33	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Engine Oil Pump Control	II	—
36	0.5	YE / GN	2494	Cylinder Shutoff Solenoid Enable Signal 4	II	- YK9
37	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	II	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.75	BK / GY	2303	Knock Sensor Low Reference 2	II	—
51	0.75	BK / YE	1716	Knock Sensor Low Reference 1	II	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	II	—
53	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	II	—
54 - 55	—	—	—	Not Occupied	—	—
56	0.5	YE / BU	5494	Cylinder Deactivation Solenoid Valve Control 4	II	- YK9
57 - 58	—	—	—	Not Occupied	—	—
59	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	II	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH / GY	1876	Knock Sensor 2 Signal	II	—
71	0.75	VT / GY	496	Knock Sensor 1 Signal	II	—
72	0.5	YE	581	Throttle Actuator Open Control	II	—
73	2.5	BK / WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (L82)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 34566-0203
Service Connector: 19333091
Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

K20 Engine Control Module X3 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	5497	Cylinder Deactivation Solenoid Valve Control 7	II	- YK9
2	0.5	GN / GY	2497	Cylinder Shutoff Solenoid Enable Signal 7	II	- YK9
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	II	—
6	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	II	—
9	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	II	—
10	0.5	GN	6271	Crankshaft Position Sensor Signal	II	—
11	0.5	VT / BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
12	0.5	BU / WH	2122	Ignition Control 2	II	—
13	0.5	VT / WH	2128	Ignition Control 8	II	—
14	0.5	BN	25	Charge Indicator Control	II	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	II	—
17 - 18	—	—	—	Not Occupied	—	—
19	0.5	BN / WH	6354	Replicated Transmission Output Speed 128K Signal	II	—
20	—	—	—	Not Occupied	—	—

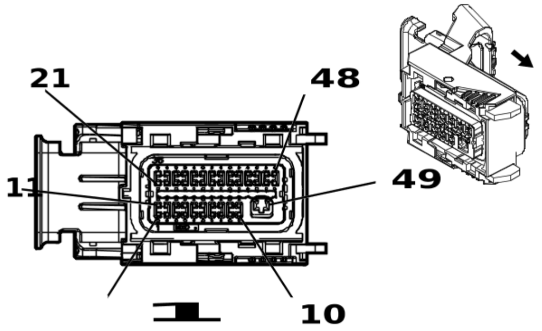
K20 Engine Control Module X3 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	II	—
25	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	II	—
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	GN / GY	2127	Ignition Control 7	II	—
29	0.5	BU / VT	2121	Ignition Control 1	II	—
30	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	II	—
33	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	II	—
34	0.5	WH / BU	2491	Cylinder Shutoff Solenoid Enable Signal 1	II	- YK9
35	—	—	—	Not Occupied	—	—
36	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	II	—
37	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	II	—
38 - 39	—	—	—	Not Occupied	—	—
40	0.5	BN / BU	357	Oil Temperature Sensor Signal	II	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	II	—
44	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
45	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
46	0.75	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
47	0.75	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
48	0.75	GN / VT	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
49	0.75	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
50	0.75	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	II	—
51	0.75	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	II	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	II	- YK9
54	—	—	—	Not Occupied	—	—
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	II	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	—
58	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	II	—
59	—	—	—	Not Occupied	—	—

K20 Engine Control Module X3 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
60	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	II	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65	0.75	GN / BK	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
66	0.75	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
67	0.75	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
68	0.75	VT	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
69	0.75	BN / GN	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
70	0.75	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	II	—
71	0.75	WH / GN	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	II	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
73	2.5	BK / WH	451	Signal Ground	I	—

K20 Engine Control Module X1 (L84/L87)



4596458

Connector Part Information

Harness Type: Engine
OEM Connector: 34576-0303
Service Connector: 19368142
Description: 49 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

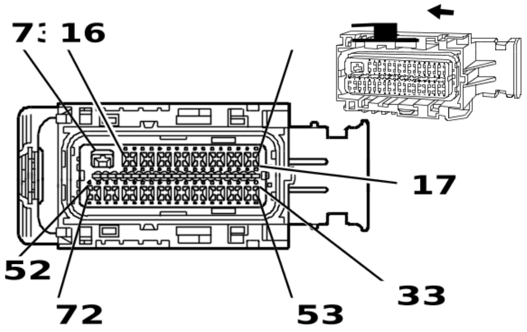
K20 Engine Control Module X1 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	II	—
6	0.5	WH / BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
8	0.5	BN / WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	II	—
14	0.5	WH / GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	GN / BU	428	EVAP Canister Purge Solenoid Control	II	—
22	—	—	—	Not Occupied	—	—
23	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	II	—

K20 Engine Control Module X1 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	II	—
25 - 26	—	—	—	Not Occupied	—	—
27	0.5 0.5	WH / BU GN / YE	5726 3337	Ignition Mode Switch Mode Control Backup Transmission Internal Mode Switch Mode Control Y	II II	MQB+ (L82/ L84/ L87) MQE+ L84
28	0.5	BN / GN	1174	Oil Level Switch Signal	II	—
29	—	—	—	Not Occupied	—	—
30	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
33	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
34	0.5	RD / BN	440	Battery Positive Voltage	II	—
35	0.5	VT / YE	3854	Cabin Heater Coolant Pump Motor Control	II	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42 - 43	—	—	—	Not Occupied	—	—
44	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	0.5	YE	4063	Hood Status A Signal	II	—
47	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
49	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (L84/L87)



1673472

Connector Part Information

Harness Type: Engine
OEM Connector: 34566-0103
Service Connector: 19333090
Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

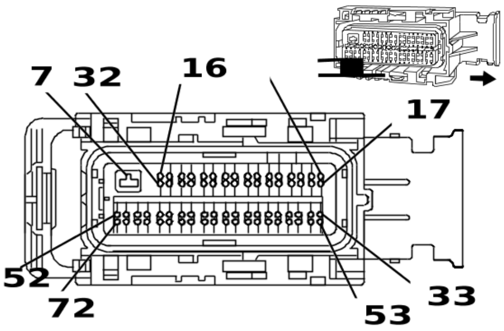
K20 Engine Control Module X2 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	II	—
2	0.5	GY	5493	Cylinder Deactivation Solenoid Valve Control 3	II	- YK9
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN / WH	4622	Engine Control Module LIN Bus 2	II	—
8	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	II	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	II	—
12	0.5	YE / BU	2124	Ignition Control 4	II	—
13	0.5	BN / BU	2126	Ignition Control 6	II	—
14	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
15	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
16	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
18	0.5	YE / GY	2493	Cylinder Shutoff Solenoid Enable Signal 3	II	- YK9
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	II	—
22 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	II	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	II	—

K20 Engine Control Module X2 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
28	0.5	GN / BU	2123	Ignition Control 3	II	—
29	0.5	BU / GY	2125	Ignition Control 5	II	—
30	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	II	—
31	0.5	BN	5496	Cylinder Deactivation Solenoid Valve Control 6	II	- YK9
32	0.5	YE / BN	2496	Cylinder Shutoff Solenoid Enable Signal 6	II	- YK9
33	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Engine Oil Pump Control	II	—
36	0.5	YE / GN	2494	Cylinder Shutoff Solenoid Enable Signal 4	II	- YK9
37	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	II	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.75	BK / GY	2303	Knock Sensor Low Reference 2	II	—
51	0.75	BK / YE	1716	Knock Sensor Low Reference 1	II	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	II	—
53	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	II	—
54	0.5	VT	5495	Cylinder Deactivation Solenoid Valve Control 5	II	- YK9
55	0.5	WH / VT	2495	Cylinder Shutoff Solenoid Enable Signal 5	II	- YK9
56	0.5	YE / BU	5494	Cylinder Deactivation Solenoid Valve Control 4	II	- YK9
57	0.5	GN	5492	Cylinder Deactivation Solenoid Valve Control 2	II	- YK9
58	0.5	WH / GN	2492	Cylinder Shutoff Solenoid Enable Signal 2	II	- YK9
59	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	II	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH / GY	1876	Knock Sensor 2 Signal	II	—
71	0.75	VT / GY	496	Knock Sensor 1 Signal	II	—
72	0.5	YE	581	Throttle Actuator Open Control	II	—
73	2.5	BK / WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (L84/L87)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 34566-0203
Service Connector: 19333091
Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

K20 Engine Control Module X3 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	5497	Cylinder Deactivation Solenoid Valve Control 7	II	- YK9
2	0.5	GN / GY	2497	Cylinder Shutoff Solenoid Enable Signal 7	II	- YK9
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	II	—
6	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	II	—
9	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	II	—
10	0.5	GN	6271	Crankshaft Position Sensor Signal	II	—
11	0.5	VT / BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
12	0.5	BU / WH	2122	Ignition Control 2	II	—
13	0.5	VT / WH	2128	Ignition Control 8	II	—
14	0.5	BN	25	Charge Indicator Control	II	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	II	—
17 - 20	—	—	—	Not Occupied	—	—
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—

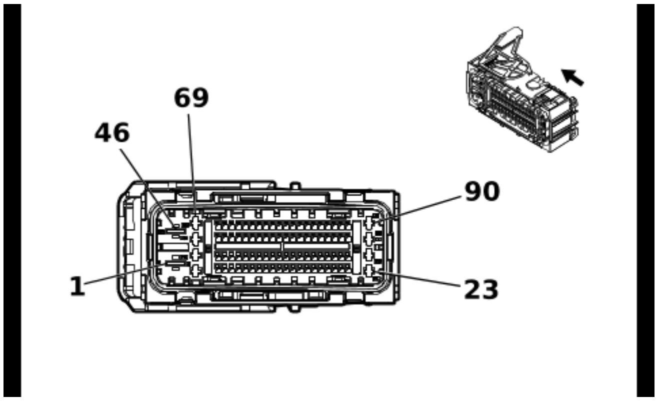
K20 Engine Control Module X3 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	II	—
25	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	II	—
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	GN / GY	2127	Ignition Control 7	II	—
29	0.5	BU / VT	2121	Ignition Control 1	II	—
30	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	II	—
33	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	II	—
34	0.5	WH / BU	2491	Cylinder Shutoff Solenoid Enable Signal 1	II	- YK9
35	0.5	WH / YE	2498	Cylinder Shutoff Solenoid Enable Signal 8	II	- YK9
36	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	II	—
37	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	II	—
38 - 39	—	—	—	Not Occupied	—	—
40	0.5	BN / BU	357	Oil Temperature Sensor Signal	II	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	II	—
44	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
45	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
46	0.75	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
47	0.75	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
48	0.75	GN / VT	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
49	0.75	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
50	0.75	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	II	—
51	0.75	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	II	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	II	- YK9
54	0.5	YE	5498	Cylinder Deactivation Solenoid Valve Control 8	II	- YK9
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	II	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	—
58	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	II	—
59	—	—	—	Not Occupied	—	—
60	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	II	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—

K20 Engine Control Module X3 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
63	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65	0.75	GN / BK	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
66	0.75	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
67	0.75	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
68	0.75	VT	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
69	0.75	BN / GN	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
70	0.75	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	II	—
71	0.75	WH / GN	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	II	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
73	2.5	BK / WH	451	Signal Ground	I	—

K20 Engine Control Module X1 (LM2)



5492269

Connector Part Information

Harness Type: Engine
OEM Connector: 2344715-7
Service Connector: 84941451
Description: 90 <p01>-Way F 0.64 GEN-Y, 2.8, 6.3 MCP Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19367373	J-35616-64B (LT BU)	J-38125-215A
II	19371214	J-35616-35 (VT)	J-38125-557
III	84616649	J-35616-40 (BU)	J-38125-556

K20 Engine Control Module X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BK / WH	451	Signal Ground	III	—
2	0.75	YE / VT	7245	High Pressure Fuel Pump Low Enable Signal	II	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	BN / BU	4065	Driveline Mount Actuator 1 Control	I	—
6	0.5	BN / YE	473	Cooling Fan High Speed Relay Control	I	—
7	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	VT / GY	7246	Exhaust Gas Recirculation Differential Pressure Signal 1	I	—
10	0.5	YE / GY	3926	Crankcase Differential Pressure Sensor Signal	I	—
11 - 14	—	—	—	Not Occupied	—	—
15	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
16	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—
17	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	I	—
18	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
19	0.75	GY / BK	1330	Variable Geometry Turbocharger Position Sensor Motor Close Control	I	—
20	0.75	WH / VT	5764	Exhaust Gas Recirculation Valve High Control	I	—

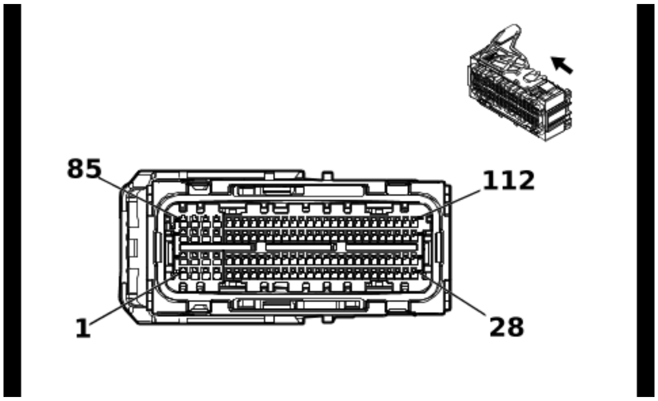
K20 Engine Control Module X1 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.75	WH / BN	1313	Variable Geometry Turbocharger Position Sensor Motor Open Control	I	—
22	0.75	VT / BK	5746	Exhaust Gas Recirculation Valve Low Control	I	—
23	0.75	RD / BN	440	Battery Positive Voltage	II	—
24	1	YE / VT	2420	Fuel High Pressure Pump Low Enable Signal	II	—
25	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
26	0.5	YE	5991	Powertrain Relay Coil Control	I	—
27	0.5	BN / WH	419	Check Engine Indicator Control	I	—
28	0.5	GN / BN	507	Wait To Start Indicator Control	I	—
29	—	—	—	Not Occupied	—	—
30	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
31	0.5	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	I	—
32 - 33	—	—	—	Not Occupied	—	—
34	0.5	WH / BU	6311	Cruise/ETC/TCC Brake Signal	I	—
35 - 36	—	—	—	Not Occupied	—	—
37	0.5	WH / BU	5726	Ignition Mode Switch Mode Control Backup	I	—
38	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
39	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	I	—
40	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
41	—	—	—	Not Occupied	—	—
42	0.75	YE / BN	1420	Exhaust Restrictor Motor Open Control	I	—
43	—	—	—	Not Occupied	—	—
44	0.75	BN	1421	Exhaust Restrictor Motor Closed Control	I	—
45	—	—	—	Not Occupied	—	—
46	4	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
47	0.75	GY / BN	7244	High Pressure Fuel Pump High Side Control	II	—
48	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	I	—
49	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	I	—
50	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	I	—
51	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	I	—
52	0.5	WH / GN	5380	Brake Position Sensor Signal	I	—
53	—	—	—	Not Occupied	—	—
54	0.5	YE	4063	Hood Status A Signal	I	—
55	—	—	—	Not Occupied	—	—
56	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
57	0.5	GY	2973	Coolant Flow Control Valve Position Signal	I	—
58	0.5	GN / GY	7316	Intake Manifold Runner Valve Actuator Control	I	—
59 - 60	—	—	—	Not Occupied	—	—
61	0.5	GN / WH	492	Mass Air Flow Sensor Signal	I	—
62 - 64	—	—	—	Not Occupied	—	—
65	0.5	GN / BU	3889	Powertrain Sensor Bus Relay Control	I	—
66	0.75	GY / BU	2971	Coolant Flow Control Actuator Control Open	I	—
67	—	—	—	Not Occupied	—	—
68	2.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—

K20 Engine Control Module X1 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
69	1	GY / BN	2419	Fuel High Pressure Pump High Side Supply Voltage	II	—
70	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	I	—
71	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	I	—
72	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	I	—
73	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
74	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	I	—
75	0.5	VT	7485	Engine Oil Temperature Sensor 2 Signal	I	—
76	0.5	BN	4645	Heater Core Outlet Temperature Signal	I	—
77	—	—	—	Not Occupied	—	—
78	0.5	GY / VT	2404	Engine Block Coolant Temperature Signal	I	—
79	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
80	—	—	—	Not Occupied	—	—
81	0.5	VT / YE	5947	Turbocharger Vane Position Sensor Signal	I	—
82	0.5	BN / WH	5763	Exhaust Gas Recirculation Position Signal	I	—
83	0.5	BU / GY	2978	Coolant Diverter Valve Position Signal	I	—
84	—	—	—	Not Occupied	—	—
85	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	I	—
86	0.5	GN / GY	465	Fuel Pump Primary Relay Control	I	—
87	0.5	YE / BK	625	Starter Enable Relay Control	I	—
88	0.75	GY / BN	2972	Coolant Flow Control Actuator Control Close	I	—
89	—	—	—	Not Occupied	—	—
90	2.5	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—

K20 Engine Control Module X2 (LM2)



5491584

Connector Part Information

Harness Type: Engine
OEM Connector: 2344717-2
Service Connector: 84941452
Description: 112 <p01>-Way F 0.64 GEN-Y, 1.2 MCON Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19367373	J-35616-64B (LT BU)	J-38125-215A
II	84963773	J-35616-16 (LT GN)	J-38125-215A

K20 Engine Control Module X2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
2	1.5	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
3	0.75	BK / YE	2834	Fuel Rail Pressure Solenoid Valve Low Reference	II	—
4	0.75	BU / WH	2530	Fuel Rail Pressure Solenoid Valve Control	II	—
5	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
6	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—
7	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—
8	0.5	VT / BU	6091	Crankshaft Position Sensor Replicated Signal	I	—
9	0.75	BN	3099	Diesel Exhaust Fluid Dosing Valve High Control	I	—
10	0.5	BN / YE	4066	Driveline Mount Actuator 2 Control	I	—
11	0.5	BN	25	Charge Indicator Control	I	—
12	0.5	BN / BU	357	Oil Temperature Sensor Signal	I	—
13	0.5	YE / BU	2408	Engine Inlet Coolant Temperature Signal	I	—
14	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	I	—
15	0.5	YE / BK	3000	Coolant Temperature Sensor 2 Signal	I	—
16	0.5	BN / GY	4644	Heater Core Inlet Temperature Signal	I	—
17	0.5	GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	I	—
18	0.5	YE / BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	I	—

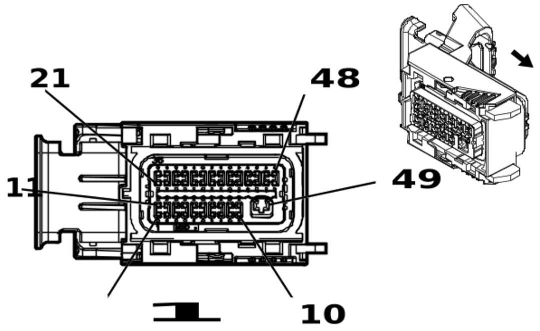
K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	BN / YE	1372	Engine Metal Temperature Sensor Signal 2	I	—
22	0.5	GY / BU	6118	Intake Manifold Air Temperature Sensor Signal	I	—
23	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
24	—	—	—	Not Occupied	—	—
25	0.5	YE / GN	3236	Exhaust Gas Recirculation Temperature Sensor 2 Signal	I	—
26	0.75	BU / WH	4014	Exhaust Gas Recirculation 2 Valve Open Control	I	—
27	0.75	BU / BN	2977	Coolant Diverter Valve Actuator Control Close	I	—
28	0.75	BU	2976	Coolant Diverter Valve Actuator Control Open	I	—
29	1.5	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
30	1.5	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
31	0.75	BU	179	Engine Oil Pump Control	II	—
32	0.75	YE / BN	106	Oil Pump Motor Control	II	—
33	0.5	BK / GY	5296	Exhaust Camshaft Position Sensor Low Reference 1	I	—
34	0.5	VT / BK	5273	Exhaust Camshaft Position Sensor 1	I	—
35	0.5	GY / YE	5297	Exhaust Camshaft Position Sensor 1 Voltage Reference	I	—
36	—	—	—	Not Occupied	—	—
37	0.75	BN / WH	3100	Diesel Exhaust Fluid Dosing Valve Low Control	I	—
38	—	—	—	Not Occupied	—	—
39	0.5	GY / BN	7071	Fuel Heater Control	I	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.75	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
47	0.5	BU / GN	4012	Exhaust Gas Recirculation 2 Valve Position Sensor Signal	I	—
48	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
49	0.5	GN / WH	4622	Engine Control Module LIN Bus 2	I	—
50	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	I	—
51	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
52	—	—	—	Not Occupied	—	—
53	0.5	BK / YE	6275	Exhaust Gas Recirculation Temperature Sensor 2 Low Reference	I	—
54	—	—	—	Not Occupied	—	—
55	0.75	BU / BN	4013	Exhaust Gas Recirculation 2 Valve Close Control	I	—
56	—	—	—	Not Occupied	—	—
57	1.5	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
58	1.5	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
59	1.5	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
60	1.5	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
61 - 67	—	—	—	Not Occupied	—	—

K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
68	0.5	BN / RD	2917	Fuel Rail Pressure Sensor 5V Reference	I	—
69	0.5	BK / GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—
70	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	I	—
71	0.5	YE / BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	I	—
72 - 73	—	—	—	Not Occupied	—	—
74	0.5	BK / BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—
75	0.5	BU	6053	Exhaust Pressure Sensor 1 Signal	I	—
76	0.5	BK / GN	3235	Exhaust Gas Recirculation Temperature Sensor 3 Low Reference	I	—
77	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
78	0.5	BU / BK	1422	Engine Water Charge Air Coolant Temperature Signal	I	—
79 - 80	—	—	—	Not Occupied	—	—
81	0.5	BK / GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	I	—
82 - 83	—	—	—	Not Occupied	—	—
84	0.75	BN / WH	582	Throttle Actuator Close Control	I	—
85	1.5	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
86	1.5	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
87	1.5	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
88	1.5	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
89 - 95	—	—	—	Not Occupied	—	—
96	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
97	0.5	BN / YE	2161	Fuel Rail Pressure Sensor 2 Signal	I	—
98 - 100	—	—	—	Not Occupied	—	—
101	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—
102	0.5	BU / WH	5277	Exhaust Gas Temperature Sensor 1 Signal	I	—
103	0.5	WH / GY	3234	Exhaust Gas Recirculation Temperature Sensor 3 Signal	I	—
104	0.5	BU / GN	5377	Exhaust Gas Temperature Sensor 2 Signal	I	—
105	0.5	BK / BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—
106	0.5	GN / YE	37	Engine Block Temperature Sensor Signal	I	—
107 - 108	—	—	—	Not Occupied	—	—
109	0.5	GY / GN	5378	Exhaust Gas Temperature Sensor 3 Signal	I	—
110	0.75	BK / BU	1408	Variable Swirl Valve Close Control	I	—
111	0.75	YE	581	Throttle Actuator Open Control	I	—
112	0.75	BK / GN	1389	Variable Swirl Valve Open Control	I	—

K20 Engine Control Module X1 (LV3)



4596458

Connector Part Information

Harness Type: Engine
OEM Connector: 34576-0303
Service Connector: 19368142
Description: 49 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

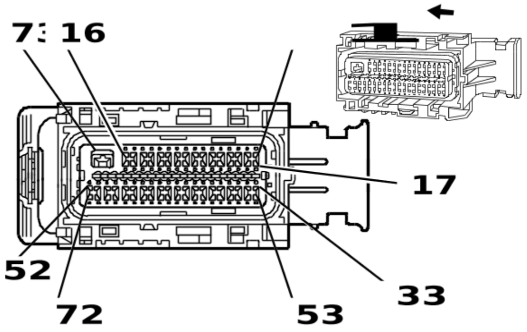
K20 Engine Control Module X1 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	II	—
6	0.5	WH / BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
8	0.5	BN / WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	II	—
14	0.5	WH / GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	II	—
16	0.5	WH / GY	1786	Transmission Park/Neutral Signal 1	II	—
17	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	GN / BU	428	EVAP Canister Purge Solenoid Control	II	—
22	—	—	—	Not Occupied	—	—
23	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	II	—

K20 Engine Control Module X1 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BN / GN	1174	Oil Level Switch Signal	II	—
29	—	—	—	Not Occupied	—	—
30	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
33	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
34	0.5	RD / BN	440	Battery Positive Voltage	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42 - 43	—	—	—	Not Occupied	—	—
44	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	0.5	YE	4063	Hood Status A Signal	II	—
47	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
49	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (LV3)



1673472

Connector Part Information

Harness Type: Engine
OEM Connector: 34566-0103
Service Connector: 19333090
Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

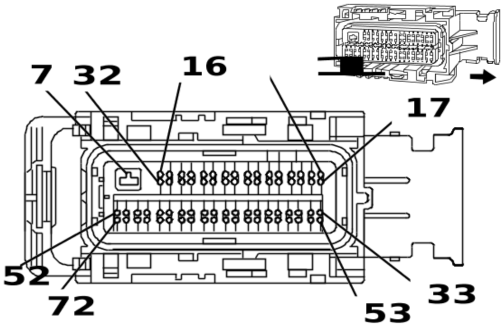
K20 Engine Control Module X2 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN / WH	4622	Engine Control Module LIN Bus 2	II	—
8	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	II	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	II	—
12	—	—	—	Not Occupied	—	—
13	0.5	GN / BU	2123	Ignition Control 3	II	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.5	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
18 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	II	—
22 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	II	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	II	—
28	—	—	—	Not Occupied	—	—
29	0.5	BU / WH	2122	Ignition Control 2	II	—

K20 Engine Control Module X2 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	II	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Engine Oil Pump Control	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	II	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.75	BK / GY	2303	Knock Sensor Low Reference 2	II	—
51	0.75	BK / YE	1716	Knock Sensor Low Reference 1	II	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	II	—
53	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	II	—
54 - 58	—	—	—	Not Occupied	—	—
59	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	II	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH / GY	1876	Knock Sensor 2 Signal	II	—
71	0.75	VT / GY	496	Knock Sensor 1 Signal	II	—
72	0.5	YE	581	Throttle Actuator Open Control	II	—
73	2.5	BK / WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (LV3)



1590596

Connector Part Information

Harness Type: Engine

OEM Connector: 34566-0203

Service Connector: 19333091

Description: 73 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-12A
II	19354746	J-35616-64B (LT BU)	J-38125-215A

K20 Engine Control Module X3 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	II	—
6	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	II	—
9	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	II	—
10	0.5	GN	6271	Crankshaft Position Sensor Signal	II	—
11	0.5	VT / BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
12	0.5	YE / BU	2124	Ignition Control 4	II	—
13	0.5	BN / BU	2126	Ignition Control 6	II	—
14	0.5	BN	25	Charge Indicator Control	II	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	II	—
17 - 18	—	—	—	Not Occupied	—	—
19	0.5	BN / WH	6354	Replicated Transmission Output Speed 128K Signal	II	—
20	—	—	—	Not Occupied	—	—
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—

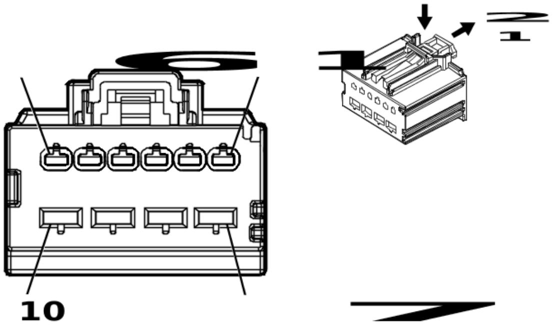
K20 Engine Control Module X3 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	II	—
25	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	II	—
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	BU / GY	2125	Ignition Control 5	II	—
29	0.5	BU / VT	2121	Ignition Control 1	II	—
30	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	II	—
33 - 35	—	—	—	Not Occupied	—	—
36	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	II	—
37	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	II	—
38 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	II	—
44	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
45 - 46	—	—	—	Not Occupied	—	—
47	0.75	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
48	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
49	0.75	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
50	0.75	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
51	0.75	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	II	—
54	0.5	GN	5492	Cylinder Deactivation Solenoid Valve Control 2	II	—
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	II	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	—
58	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	II	—
59	—	—	—	Not Occupied	—	—
60	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	II	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65 - 66	—	—	—	Not Occupied	—	—
67	0.75	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
68	0.75	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—

K20 Engine Control Module X3 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
69	0.75	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
70	0.75	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
71	0.75	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
73	0.5	BK / WH	451	Signal Ground	I	—

K29F Seat Heating Control Module - Front X1 (KA1)



5035058

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31372-1600
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 1.5, 2.8 MX Series(BK)

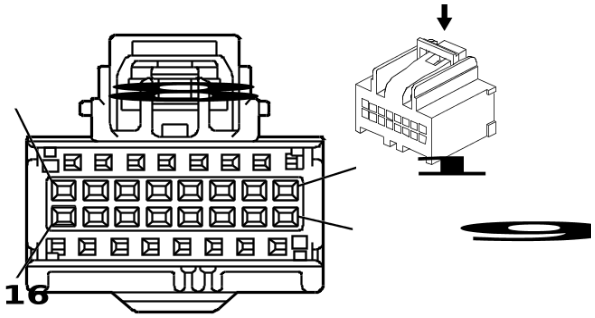
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

K29F Seat Heating Control Module - Front X1 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	2481	Passenger Seat Back Heating Element Control	I	—
2	0.75	BN / BU	2479	Passenger Seat Heating Element Control	I	—
3	0.75	GY / BK	2480	Passenger Seat Heating Element Low Reference	I	—
4	0.75	BN / BK	2078	Driver Seat Heating Element Low Reference	I	—
5	0.75	BN	2432	Driver Seat Back Heating Element Control	I	—
6	0.75	BN / VT	2077	Driver Seat Heating Element Control	I	—
7	0.75	RD	6140	Battery Positive Voltage	II	—
8	0.75	BK	1250	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD / GN	5140	Battery Positive Voltage	II	—

K29F Seat Heating Control Module - Front X2 (KA1)



1653409

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 7283-9076-30
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way F 0.64 Kaizen Series(BK)

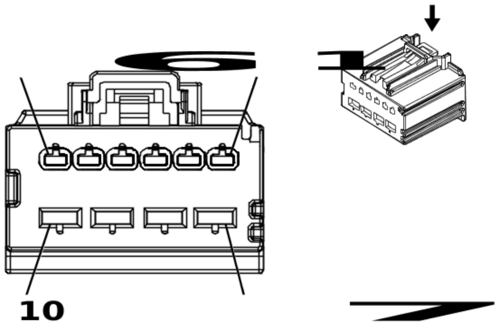
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K29F Seat Heating Control Module - Front X2 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	2080	Driver Heated Seat Thermistor Low Reference	I	—
2	0.5	BK / GY	2435	Passenger Heated Seat Thermistor Low Reference	I	—
3	0.5	BU	2425	Driver Seat Back Heating Temperature Sensor Signal	I	—
4	0.5	WH / BU	2436	Passenger Seat Back Heating Temperature Sensor Signal	I	—
5	0.5	WH / GY	2434	Passenger Seat Heating Temperature Sensor Signal	I	—
6	0.5	YE / GY	2079	Driver Seat Heating Temperature Sensor Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN / BU	6133	Body Control Module LIN Bus 2	I	—
9	0.35	GN / VT	5906	Driver Seat Blower Motor Control 1	I	KQV
10	0.5	WH	5908	Passenger Seat Blower Motor Control 1	I	KQV
11	0.5	BK / VT	2426	Driver Heated Back Thermistor Low Reference	I	—
12	0.5	BK / GN	2482	Passenger Heated Back Thermistor Low Reference	I	—
13 - 16	—	—	—	Not Occupied	—	—

K29R Seat Heating Control Module - Rear X1 (KA1)



3791446

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 1.5, 2.8 MX Series(BK)

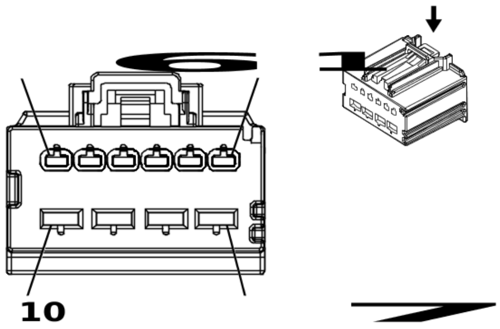
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

K29R Seat Heating Control Module - Rear X1 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN / BN	2296	Right Rear Seat Cushion Heating Element Control	I	—
3	0.75	GN / BK	2297	Right Rear Seat Cushion Heating Element Low Reference	I	—
4	0.75	BN / BK	2295	Left Rear Seat Cushion Heating Element Low Reference	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	GY	2294	Left Rear Seat Cushion Heating Element Control	I	—
7	0.75	RD / YE	240	Battery Positive Voltage	II	—
8	1	BK	1150	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD / VT	340	Battery Positive Voltage	II	—

K29R Seat Heating Control Module - Rear X1 (KA6)



3791446

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 1.5, 2.8 MX Series(BK)

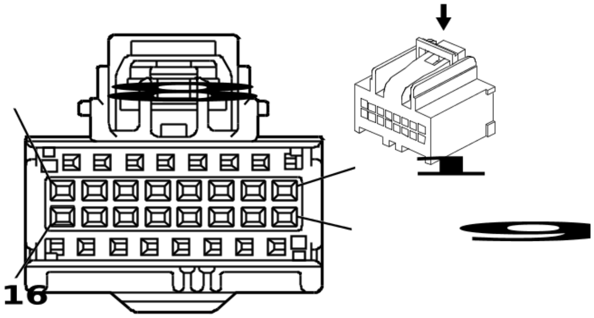
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

K29R Seat Heating Control Module - Rear X1 (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN / BN	2296	Right Rear Seat Cushion Heating Element Control	I	—
3	0.75	GN / BK	2297	Right Rear Seat Cushion Heating Element Low Reference	I	—
4	0.75	BN / BK	2295	Left Rear Seat Cushion Heating Element Low Reference	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	GY	2294	Left Rear Seat Cushion Heating Element Control	I	—
7	0.75	RD / YE	240	Battery Positive Voltage	II	—
8	1	BK	1150	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD / VT	340	Battery Positive Voltage	II	—

K29R Seat Heating Control Module - Rear X2 (KA1)



1653409

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 7283-9076-30
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way F 0.64 Kaizen Series(BK)

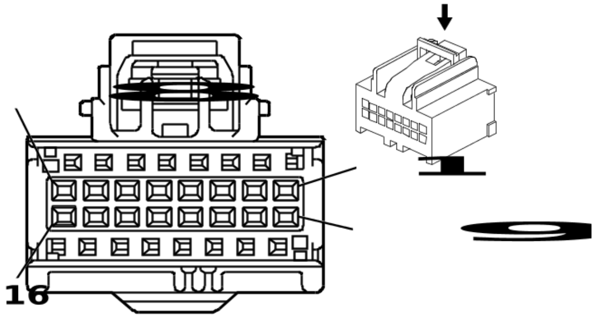
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K29R Seat Heating Control Module - Rear X2 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / WH	7048	Left Rear Cushion Thermistor Feedback Signal	I	—
2	0.75	WH / BK	7054	Right Rear Cushion Thermistor Feedback Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.75	YE / WH	7053	Right Rear Seat Cushion Temperature Sensor Signal	I	—
6	0.75	WH / BU	7047	Left Rear Seat Cushion Temperature Sensor Signal	I	—
7	0.5	BK	1150	Ground	I	—
8	0.5	GN / BU	6133	Body Control Module LIN Bus 2	I	—
9 - 16	—	—	—	Not Occupied	—	—

K29R Seat Heating Control Module - Rear X2 (KA6)



1653409

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 7283-9076-30
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way F 0.64 Kaizen Series(BK)

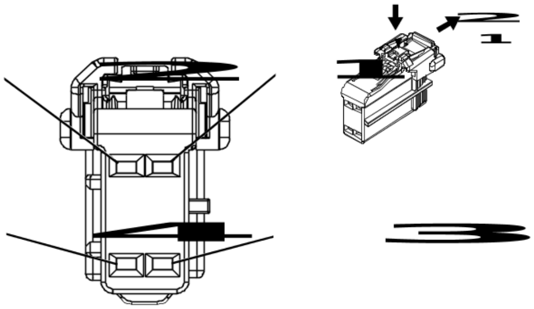
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K29R Seat Heating Control Module - Rear X2 (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / WH	7048	Left Rear Cushion Thermistor Feedback Signal	I	—
2	0.75	WH / BK	7054	Right Rear Cushion Thermistor Feedback Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.75	YE / WH	7053	Right Rear Seat Cushion Temperature Sensor Signal	I	—
6	0.75	WH / BU	7047	Left Rear Seat Cushion Temperature Sensor Signal	I	—
7	0.5	BK	1150	Ground	I	—
8	0.5	GN / BU	6133	Body Control Module LIN Bus 2	I	—
9 - 16	—	—	—	Not Occupied	—	—

K32 Steering Wheel Heating Control Module X1 (UVD)



4115727

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13595574
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2 Series(BK)

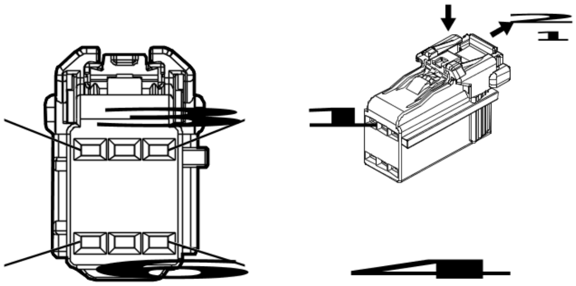
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

K32 Steering Wheel Heating Control Module X1 (UVD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	5888	Steering Wheel Heating High Control	I	—
2	—	BK	1354	Heated Steering Wheel Low Reference	I	—
3	—	BU	5885	Steering Wheel Heating Voltage Reference	I	—
4	—	GY	5886	Steering Wheel Heating Temperature Sensor Signal	I	—

K32 Steering Wheel Heating Control Module X2 (UVD)



4862126

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13588647
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.2 Series(BK)

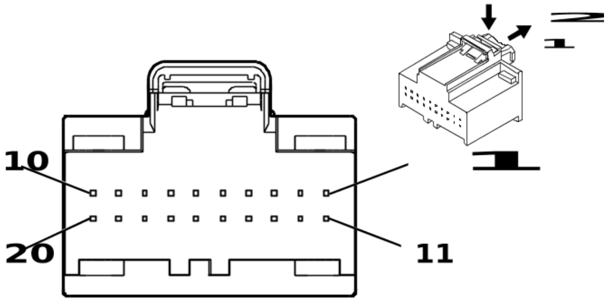
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

K32 Steering Wheel Heating Control Module X2 (UVD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	5883	Steering Wheel Heating Switch Signal	I	—
2	—	GY / OG	5884	Steering Wheel Heating Switch LED Control	I	—
3	—	OG	1139	Run/Crank Ignition 1 Voltage	I	—
4	—	BK	1850	Ground	I	—
5	—	BK	1850	Ground	I	—
6	—	WH	4119	HVAC Control Module LIN Bus 2	I	—

K33 HVAC Control Module X1



5109511

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 31410-0208
Service Connector: 13525993
Description: 20 <p01>-Way F 0.64 Series(GN)

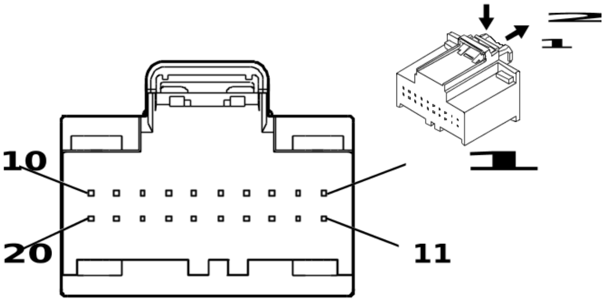
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (LT BU)	J-38125-215A

K33 HVAC Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	GY / GN	7565	Windshield Temperature Sensor Signal	I	ASV
3	—	—	—	Not Occupied	—	—
4	0.35	BU / WH	734	Inside Air Temperature Sensor Signal	I	C4P/ CJ2
5	0.35	YE / BU	3197	Intake Air Humidity and Temperature Sensor Signal	I	ASV
6	0.35	YE / RD	597	5V Reference	I	ASV
7	0.35	BK / BU	7566	Windshield Temperature and Inside Moisture Sensor Low Reference	I	ASV
8 - 11	—	—	—	Not Occupied	—	—
12	0.35	GY / BU	7564	Humidity Sensor Signal 2	I	ASV
13	—	—	—	Not Occupied	—	—
14	0.35	GY	590	Driver Solar Sensor Signal	I	C4P/ CJ2
15	—	—	—	Not Occupied	—	—
16	0.5	BK	1050	Ground	I	—
17 - 20	—	—	—	Not Occupied	—	—

K33 HVAC Control Module X2



5109514

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 31410-0207
Service Connector: 13525992
Description: 20 <p01>-Way F 0.64 Series(BN)

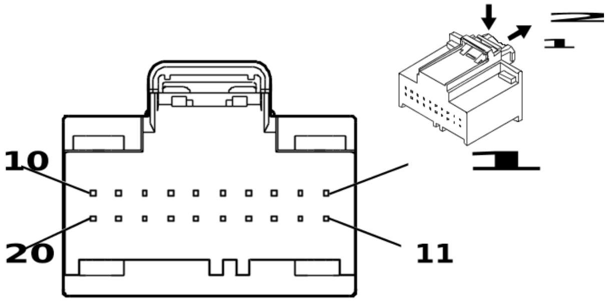
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (LT BU)	J-38125-215A

K33 HVAC Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	3340	Battery Positive Voltage	I	—
2	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	GN / YE	7531	HVAC Control Module LIN Bus 1	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	GN / BU	4119	HVAC Control Module LIN Bus 2	I	KI3
7	0.35	VT	3195	Auxiliary Heater Control	I	C32
8	0.5	BK	1050	Ground	I	—
9	0.35	VT / BN	300	Run Ignition 3 Voltage	I	—
10	0.35	BU / YE	7574	A/C Compressor Solenoid Valve Control	I	—
11	0.35	BU / BN	7573	A/C Compressor Solenoid Valve Control	I	—
12 - 14	—	—	—	Not Occupied	—	—
15	0.35	BU / GY	754	Blower Motor Speed Control	I	—
16 - 17	—	—	—	Not Occupied	—	—
18	0.35	BK / GN	7567	Solar Sensor Low Reference	I	—
19	0.5	BN / VT	193	Rear Defogger Relay Control	I	—
20	—	—	—	Not Occupied	—	—

K33 HVAC Control Module X3



5112891

Connector Part Information

Harness Type: HVAC
OEM Connector: 35160140
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way F 0.64 Series(BK)

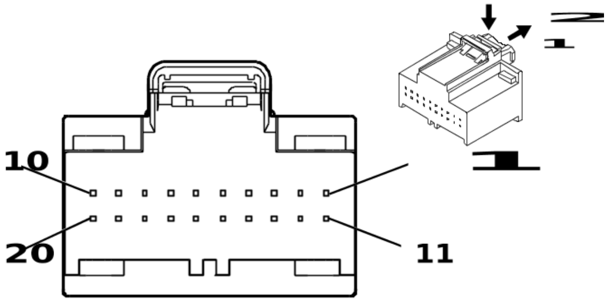
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K33 HVAC Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GY	3165	Mode Door Actuator Control 1	I	—
3	0.75	BN / GN	3166	Mode Door Actuator Control 2	I	—
4	0.75	BU / BN	3167	Mode Door Actuator Control 3	I	—
5	0.75	GY	3168	Mode Door Actuator Control 4	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.35	BK / YE	1791	Air Temperature Door Low Reference	I	—
10	—	—	—	Not Occupied	—	—
11	0.75	BN / VT	3169	Air Temperature Door Actuator Control 1	I	—
12	0.75	BN / WH	3170	Air Temperature Door Actuator Control 2	I	—
13	0.75	BN / WH	3171	Air Temperature Door Actuator Control 3	I	—
14	0.75	WH	3172	Air Temperature Door Actuator Control 4	I	—
15	0.75	WH / BK	7572	HVAC Door Actuator Control	I	—
16	0.75	WH / BK	3173	Air Inlet Door Actuator Control 1	I	—
17	0.75	VT / GN	3174	Air Inlet Door Actuator Control 2	I	—
18	0.75	YE / GN	3175	Air Inlet Door Actuator Control 3	I	—
19	0.75	YE	3176	Air Inlet Door Actuator Control 4	I	—
20	0.35	BN	6137	A/C Evaporator Temperature Sensor Signal	I	—

K33 HVAC Control Module X4



5109537

Connector Part Information

Harness Type: HVAC
OEM Connector: 35165309
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way F 0.64 Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K33 HVAC Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.35	GY	3181	Passenger Air Temperature Door Actuator Control 1	I	—
6	0.35	BN / GN	3182	Passenger Air Temperature Door Actuator Control 2	I	—
7	0.35	BN	3183	Passenger Air Temperature Door Actuator Control 3	I	—
8	0.35	VT / GN	3184	Passenger Air Temperature Door Actuator Control 4	I	CJ2
9 - 20	—	—	—	Not Occupied	—	—

K34 Glow Plug Control Module X1 (LM2)

—

Connector Part Information

Harness Type: Glow Plug
OEM Connector: 12639355
Service Connector: Service by Harness - See Part Catalog
Description: 1 <p01>-Way

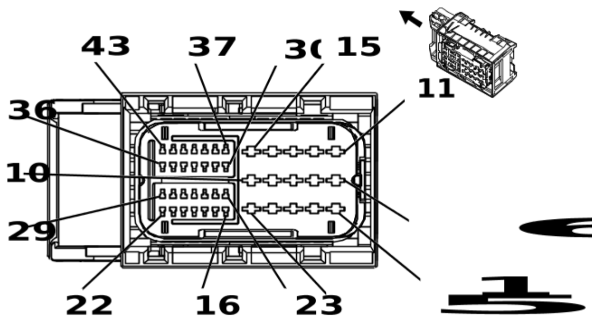
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K34 Glow Plug Control Module X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	16	RD / VT	842	Battery Positive Voltage	I	—

K34 Glow Plug Control Module X2 (LM2)



3553744

Connector Part Information

Harness Type: Engine
OEM Connector: 10349780
Service Connector: 13576417
Description: 43 <p01>-Way F 1.2, 2.8 Series, Sealed(BK)

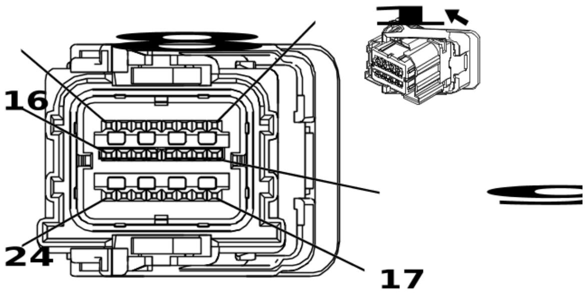
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576372	J-35616-4A (PU)	J-38125-556
II	19331734	J-35616-12 (BU)	J-38125-11A

K34 Glow Plug Control Module X2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	2.5	GY / YE	1584	Glow Plug 4 Control	I	—
3	2.5	GY / GN	1583	Glow Plug 3 Control	I	—
4	2.5	GY / BN	1582	Glow Plug 2 Control	I	—
5	2.5	GY / BU	1581	Glow Plug 1 Control	I	—
6 - 9	—	—	—	Not Occupied	—	—
10	2.5	BK / WH	4451	Ground	I	—
11	—	—	—	Not Occupied	—	—
12	2.5	GY / WH	1585	Glow Plug 5 Control	I	—
13	2.5	GY / VT	1586	Glow Plug 6 Control	I	—
14 - 17	—	—	—	Not Occupied	—	—
18	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
19	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
20 - 24	—	—	—	Not Occupied	—	—
25	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
26	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
27 - 32	—	—	—	Not Occupied	—	—
33	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
34 - 39	—	—	—	Not Occupied	—	—
40	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
41 - 43	—	—	—	Not Occupied	—	—

K36 Inflatable Restraint Sensing and Diagnostic Module X1



3240106

Connector Part Information

Harness Type: Body
OEM Connector: 35036798
Service Connector: 84769281
Description: 24 <p01>-Way F 0.64 Series, Sealed(YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19328872	J-35616-64B (LT BU)	J-38125-215A

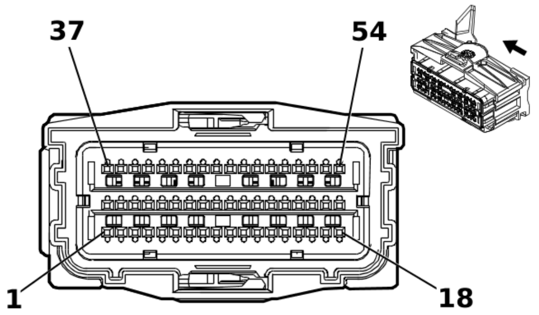
K36 Inflatable Restraint Sensing and Diagnostic Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG / GN	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
2	0.35	WH / OG	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—
3	0.35	BN / OG	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
4	0.35	OG / VT	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
5	0.35	YE / OG	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
6	0.35	OG / WH	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—
7	0.35	OG / VT	3026	Passenger Instrument Panel Air Bag Stage 2 Low Control	I	—
8	0.35	GY / OG	3027	Passenger Instrument Panel Air Bag Stage 2 High Control	I	—
9	0.5	RD / GN	4440	Battery Positive Voltage	I	—
10	0.35	VT / WH	5234	Passenger Seat Belt Indicator Control	I	—
11	0.35	BU	2307	Passenger Air Bag On Indicator Control	I	—
12	0.35	GN	2308	Passenger Air Bag Off Indicator Control	I	—
13	0.5	BU / WH	3119	Roof Rail Air Bag Disable Switch Signal	I	—
14	0.5	BN / WH	3895	Roof Rail Air Bag Disable Switch Low Reference	I	—
15	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
16	—	—	—	Not Occupied	—	—
17	0.35	WH / BU	5986	Serial Data Communication Enable	I	—
18	0.5	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
19	0.5	BK / WH	2551	Signal Ground	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
21 - 24	—	—	—	Not Occupied	—	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2



5197939

Connector Part Information

Harness Type: Body
OEM Connector: 35036051
Service Connector: 84769282
Description: 54 <p01>-Way F 0.64 Series, Sealed(YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19328872	J-35616-64B (LT BU)	J-38125-215A
II	Not required	J-35616-64B (LT BU)	No Tool Required

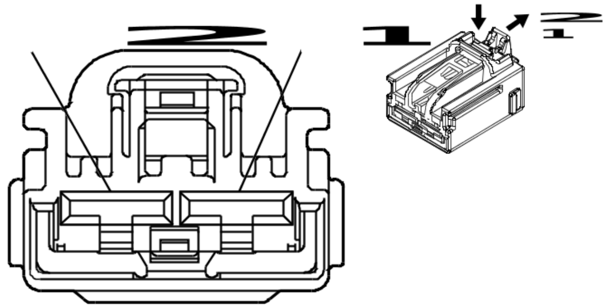
K36 Inflatable Restraint Sensing and Diagnostic Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 8	—	—	—	Not Occupied	—	—
9	0.5	OG / YE	3481	Driver Seat Belt Anchor Pretensioner High Control	II	—
10	0.5	YE / OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	II	—
11	0.5	GY / OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	II	—
12	0.5	OG / BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	II	—
13	0.5	OG / BU	3068	Driver Seat Side Air Bag High Control	I	—
14	0.5	GN / OG	3069	Driver Seat Side Air Bag Low Control	I	—
15	0.35	BN / OG	3067	Passenger Seat Side Air Bag Low Control	I	—
16	0.35	OG / GY	3066	Passenger Seat Side Air Bag High Control	I	—
17	0.5	OG / GN	5019	Left Front Roof Rail Air Bag High Control	II	—
18	0.5	VT / OG	5020	Left Front Roof Rail Air Bag Low Control	II	—
19	0.35	OG / GN	2132	Left Front Side Impact Sensor Signal	I	—
20	0.35	BK / OG	6628	Left Front Side Impact Sensor Low Reference	I	—
21	0.35	BK / OG	6629	Right Front Side Impact Sensor Low Reference	I	—
22	0.35	BN / OG	2134	Right Front Side Impact Sensor Signal	I	—
23	0.5	OG / YE	354	Left Front Impact Discriminating Sensor Signal	I	—
24	0.5	BK / OG	5045	Left Front Impact Discriminating Sensor Low Reference	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.5	BK / OG	5600	Right Front Impact Discriminating Sensor Low Reference	I	—
26	0.5	OG / GN	1409	Right Front Impact Discriminating Sensor Signal	I	—
27	0.35	OG / BU	6622	Left Rear Side Impact Sensor Signal	I	—
28	0.35	BK / OG	6623	Left Rear Side Impact Sensor Low Reference	I	—
29	0.35	BK / OG	6627	Right Rear Side Impact Sensor Low Reference	I	—
30	0.35	OG / WH	6626	Right Rear Side Impact Sensor Signal	I	—
31 - 36	—	—	—	Not Occupied	—	—
37	0.5	OG / WH	3477	Driver Seat Belt Retractor Pretensioner High Control	II	—
38	0.5	GY / OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	II	—
39	0.5	WH / OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	II	—
40	0.5	OG / GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	II	—
41	0.35	OG / BN	238	Driver Seat Belt Switch Signal	I	—
42	—	—	—	Not Occupied	—	—
43	0.35	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
44	0.35	BK / OG	1361	Passenger Seat Belt Switch Low Reference	I	—
45	0.35	OG / VT	1362	Passenger Seat Belt Switch Signal	I	—
46 - 52	—	—	—	Not Occupied	—	—
53	0.5	OG / GY	5021	Right Front Roof Rail Air Bag High Control	II	—
54	0.5	WH / OG	5022	Right Front Roof Rail Air Bag Low Control	II	—

K40 Seat Memory Control Module X1 (A45)



5116029

Connector Part Information

Harness Type: Driver Seat

OEM Connector: 7289-7782-40

Service Connector: Service by Harness - See Part Catalog

Description: 2 <p01>-Way F 6.3 Series(GY)

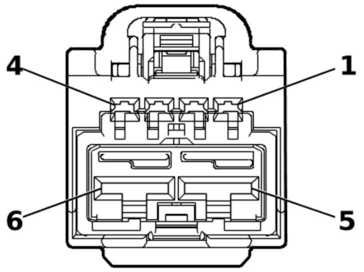
Terminal Part Information

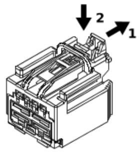
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

K40 Seat Memory Control Module X1 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / BN	1140	Battery Positive Voltage	I	—
2	2.5	RD / YE	5040	Battery Positive Voltage	I	—

K40 Seat Memory Control Module X2 (A45)





5355899

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7289-9870-30
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5, 6.3 YESC Series(BK)

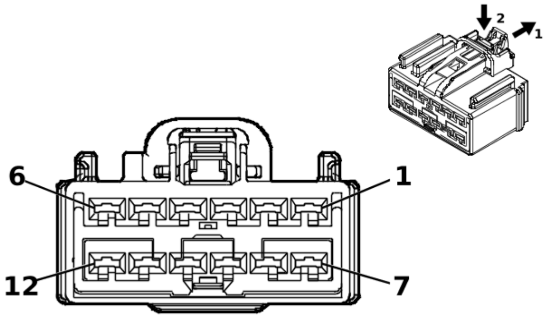
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required

K40 Seat Memory Control Module X2 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	GN / WH	7530	Driver Seat Memory Control Module LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—
5	2.5	BK	1150	Ground	II	—
6	—	—	—	Not Occupied	—	—

K40 Seat Memory Control Module X3 (A45)



5254826

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7289-9152-40
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way F 2.8 Kaizen Series(L-GY)

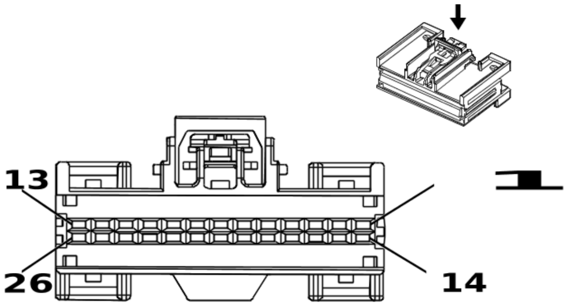
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

K40 Seat Memory Control Module X3 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / YE	276	Driver Seat Recline Motor Forward Control	I	—
2	1.5	BU / YE	277	Driver Seat Recline Motor Rearward Control	I	—
3	1.5	GN / BN	286	Driver Seat Front Vertical Motor Up Control	I	—
4	1.5	BU / VT	287	Driver Seat Front Vertical Motor Down Control	I	—
5	1.5	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
6	1.5	GY / BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
7 - 10	—	—	—	Not Occupied	—	—
11	1.5	YE / BU	285	Driver Seat Horizontal Motor Forward Control	I	—
12	1.5	GY / GN	284	Driver Seat Horizontal Motor Rearward Control	I	—

K40 Seat Memory Control Module X5 (A45)



2916473

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7287-2043-30
Service Connector: Service by Harness - See Part Catalog
Description: 26 <p01>-Way F 0.64 Series(BK)

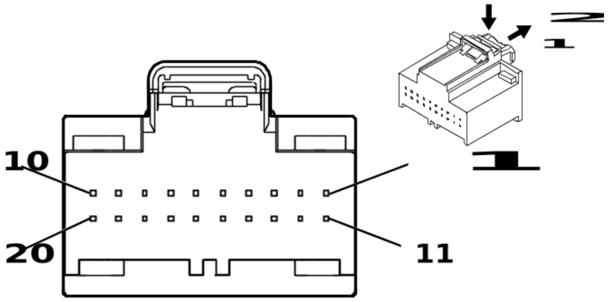
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K40 Seat Memory Control Module X5 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	3298	Seat Position Sensors High Reference 2	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BN	3038	Driver Seat Right Rear Haptic Movement Motor Control	I	—
5	0.5	YE / BN	3037	Driver Seat Left Rear Haptic Movement Motor Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	YE / BN	1522	Seat Horizontal Forward Switch Signal	I	—
8	0.5	GY / GN	1523	Seat Horizontal Rearward Switch Signal	I	—
9	0.5	GN / BN	1518	Seat Front Vertical Up Switch Signal	I	—
10	0.5	BU / VT	1520	Seat Front Vertical Down Switch Signal	I	—
11	0.5	GN	569	Seat Horizontal Motor Position Sensor Signal	I	—
12	0.5	BN / WH	557	Seat Front Vertical Motor Position Sensor Signal	I	—
13 - 18	—	—	—	Not Occupied	—	—
19	0.5	YE	1519	Seat Rear Vertical Up Switch Signal	I	—
20	0.5	YE / BU	1521	Seat Rear Vertical Down Switch Signal	I	—
21	0.5	GY / BK	1269	Seat Recline Forward Switch Signal	I	—
22	0.5	GN / GY	1270	Seat Recline Rearward Switch Signal	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.5	YE / BU	568	Seat Rear Vertical Motor Position Sensor Signal	I	—
26	0.5	WH / BK	570	Driver Seat Recline Motor Position Sensor Signal	I	—

K40 Seat Memory Control Module X6 (A45)



5109537

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 31410-0206
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way F 0.64 Series(GY)

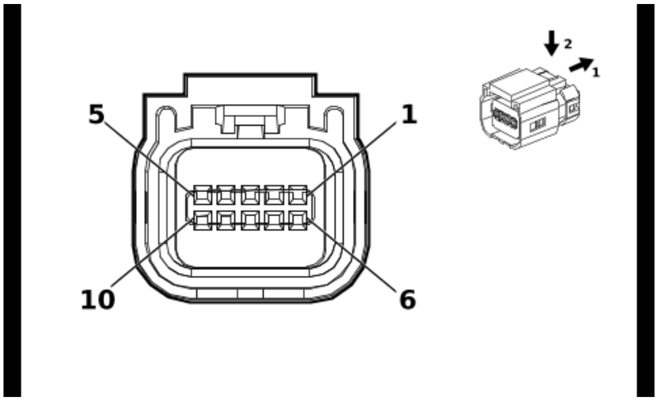
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K40 Seat Memory Control Module X6 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 10	—	—	—	Not Occupied	—	—
11	0.5	BK / BU	5978	Memory Switch Low Reference	I	—
12	0.5	WH	615	Seat Memory Switch Signal 1	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.5	BU / GN	614	Seat Memory Switch Set Signal	I	—
16 - 20	—	—	—	Not Occupied	—	—

K43 Power Steering Control Module X1



2586629

Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 35089076
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 Series, Sealed(BK)

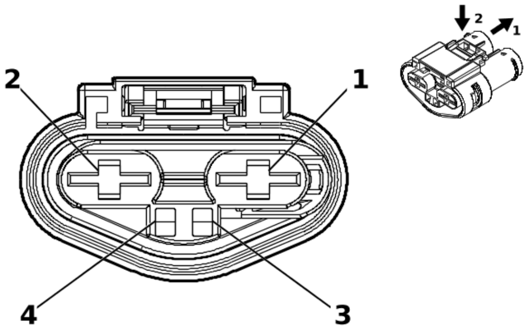
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K43 Power Steering Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
3	0.5	GN	2501	High Speed GMLAN Serial Data [-] 1	I	—
4	0.5	BU	6105	High Speed GMLAN Serial Data [+] 2	I	—
5	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
6	0.5	GY	5986	Serial Data Communication Enable	I	—
7	0.5	BU / BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
8	0.5	GY / WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
9	0.5	YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
10	0.5	VT	6106	High Speed GMLAN Serial Data [-] 2	I	—

K43 Power Steering Control Module X2



5330342

Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 13508902
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2, 2.8 MAK Series, Sealed(BK)

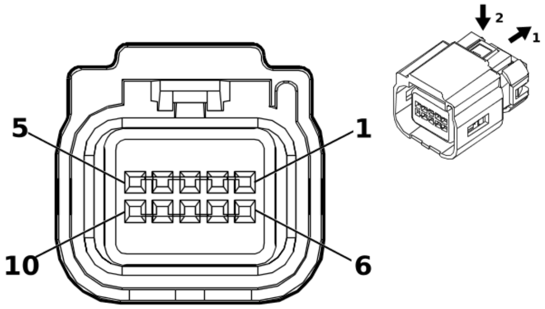
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K43 Power Steering Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD	3542	Battery Positive Voltage	I	—
2	25	BK	350	Ground	I	—
3 - 4	—	—	—	Not Occupied	—	—

K43 Power Steering Control Module X3



3608469

Connector Part Information

Harness Type: Power Steering Shaft Torque/Position Sensor
OEM Connector: 13817799
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 0.64 Kaizen Series, Sealed(GY)

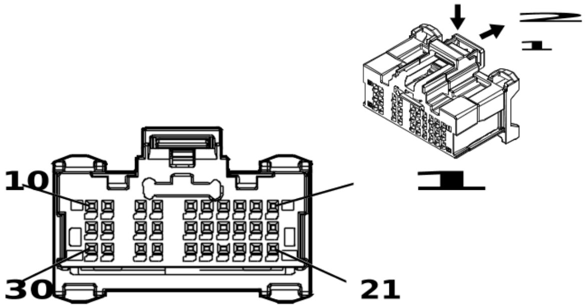
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K43 Power Steering Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	8367	Handwheel Channel A Torque Pressure Sensor 1 SENT Signal	I	—
2	0.5	RD	8366	Handwheel Channel A High Reference	I	—
3	0.5	BK	8370	Handwheel Channel A Low Reference	I	—
4	0.5	WH / RD	8371	Handwheel Channel B High Reference	I	—
5	0.5	WH / BU	8372	Handwheel Channel B Torque Pressure Sensor 1 SENT Signal	I	—
6	0.5	VT	8368	Handwheel Channel A Torque Pressure Sensor 2 SENT Signal	I	—
7	0.5	OG	8369	Handwheel Channel A Angle Position Sensor SENT Signal	I	—
8	0.5	GY	8375	Handwheel Channel B Low Reference	I	—
9	0.5	YE	8374	Handwheel Channel B Angle Position Sensor SENT Signal	I	—
10	0.5	GN	8373	Handwheel Channel B Torque Pressure Sensor 2 SENT Signal	I	—

K56 Serial Data Gateway Module X1



4900333

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2309644-3
Service Connector: 13519319
Description: 30 <p01>-Way F 0.5 MQS Series(BK with GY Terminal Position Assurance)

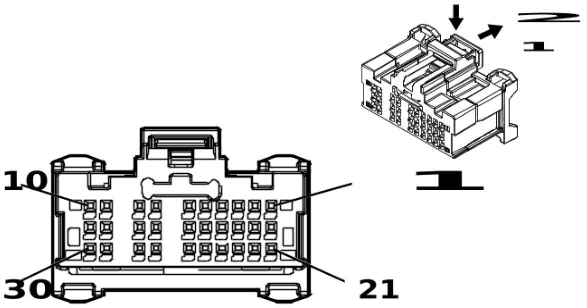
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

K56 Serial Data Gateway Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	3340	Battery Positive Voltage	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.35	BU / GY	3935	High Speed GMLAN Serial Data [+] 8	I	—
5	0.35	WH / GY	3936	High Speed GMLAN Serial Data [-] 8	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	BK / WH	1851	Signal Ground	I	—
8	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
9	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.35	BU / WH	2089	High Speed GMLAN Serial Data [+] 13	I	—
14	0.35	WH	2090	High Speed GMLAN Serial Data [-] 13	I	—
15	0.35	BU / BK	1978	High Speed GMLAN Serial Data [+] 11	I	—
16	0.35	WH	1979	High Speed GMLAN Serial Data [-] 11	I	—
17	0.35	BU / BN	1980	High Speed GMLAN Serial Data [+] 12	I	—
18	0.35	WH	1981	High Speed GMLAN Serial Data [-] 12	I	—
19	—	—	—	Not Occupied	—	—
20	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
21 - 25	—	—	—	Not Occupied	—	—
26	0.35	GN / WH	2100	Low Speed GMLAN Serial Data 3	I	—
27 - 29	—	—	—	Not Occupied	—	—
30	0.35	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—

K56 Serial Data Gateway Module X2



4897967

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2309644-4
Service Connector: 13519320
Description: 30 <p01>-Way F 0.5 MQS Series(BK with BU Terminal Position Assurance)

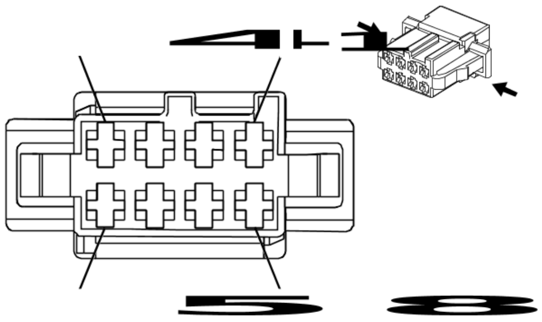
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

K56 Serial Data Gateway Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.35	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
5	0.35	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
6	0.35	BU / GY	3935	High Speed GMLAN Serial Data [+] 8	I	—
7	0.35	WH / GY	3936	High Speed GMLAN Serial Data [-] 8	I	—
8	0.35	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
9	0.35	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
10	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
11 - 13	—	—	—	Not Occupied	—	—
14	0.35	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
15	0.35	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
16	0.35	BU / GY	3935	High Speed GMLAN Serial Data [+] 8	I	—
17	0.35	WH / GY	3936	High Speed GMLAN Serial Data [-] 8	I	—
18	0.35	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
19	0.35	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
20	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—
21 - 22	—	—	—	Not Occupied	—	—
23	0.35	VT / BK	1639	Run/Crank Ignition 1 Voltage	I	—
24	—	—	—	Not Occupied	—	—
25	0.35	WH / BU	5986	Serial Data Communication Enable	I	—
26 - 30	—	—	—	Not Occupied	—	—

K60 Steering Column Lock Module (BTM)



2173871

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10718780
Service Connector: 13576545
Description: 8 <p01>-Way F 1.6 Micro-Timer Series(BK)

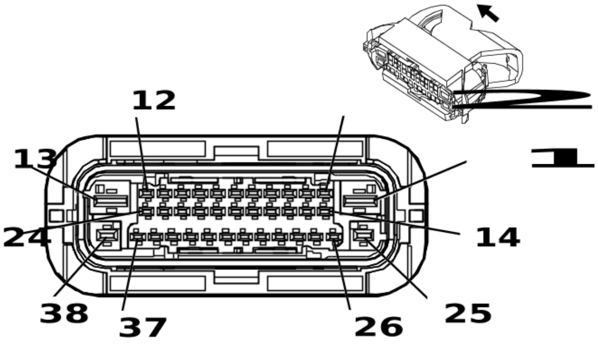
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

K60 Steering Column Lock Module (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BU / VT	5904	Steering Column Lock Status Signal	I	—
3	0.35	BU / VT	807	Ignition Off/Accessory Ignition Voltage	I	—
4	0.35	GN / VT	1601	Steering Column Lock Signal	I	—
5	0.5	RD / GY	4140	Battery Positive Voltage	I	—
6	0.35	BK	1850	Ground	I	—
7	0.35	BK / WH	1851	Signal Ground	I	—
8	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—

K68 Trailer Lighting Control Module (U1D)



5141918

Connector Part Information

Harness Type: Chassis
OEM Connector: 13670757
Service Connector: 19371190
Description: 38 <p01>-Way F 1.5, 2.8, 4.8 MCP Series, Sealed(BK with BN Inner Connector)

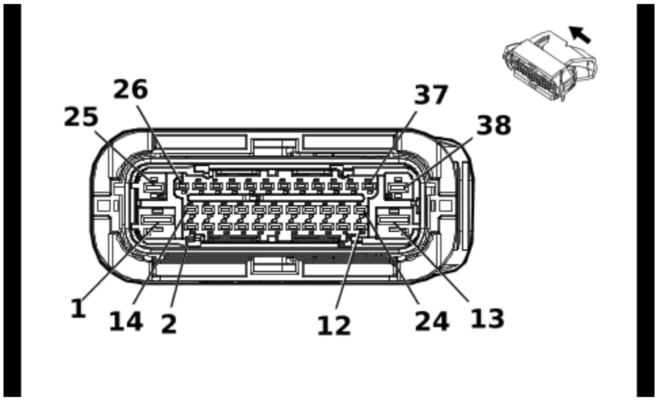
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-215A
II	19368624	J-35616-35 (VT)	J-38125-557
III	19369235	J-35616-14 (GN)	J-38125-215A
IV	85158596	J-35616-40 (BU)	J-38125-556

K68 Trailer Lighting Control Module (U1D)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	RD / YE	5840	Battery Positive Voltage	IV	—
2	0.75	YE / GY	1618	Left Rear Trailer Stop/Turn Lamp Control	III	—
3	0.75	GN / VT	1619	Right Rear Trailer Stop/Turn Lamp Control	III	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.75	GN / WH	5189	Trailer Backup Lamp Control	III	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	III	—
11	0.5	VT / WH	5065	Stop Lamp Relay Coil Control	III	—
12	—	—	—	Not Occupied	—	—
13	2.5	BK	1750	Ground	IV	—
14 - 24	—	—	—	Not Occupied	—	—
25	0.75	GY / BN	2109	Trailer Park Lamp Control	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	GN	5060	Low Speed GMLAN Serial Data	III	—
28 - 37	—	—	—	Not Occupied	—	—
38	2	RD / VT	5640	Battery Positive Voltage	II	—

K69 Transfer Case Control Module (NP0/NQH)



3240112

Connector Part Information

Harness Type: Engine
OEM Connector: 33110415
Service Connector: 19353395
Description: 38 <p01>-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed(BK with BU Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-557
II	19369235	J-35616-14 (GN)	EL-38125-560-A
III	85158596	J-35616-40 (BU)	J-38125-556

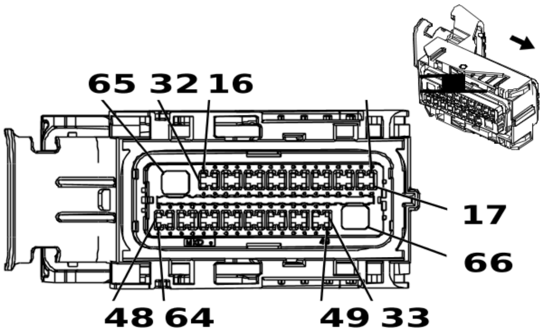
K69 Transfer Case Control Module (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD / GY	1342	Battery Positive Voltage	III	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
4	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
5	0.5	WH / GN	7479	Rotary Position Sensor Signal	II	—
6	—	—	—	Not Occupied	—	—
7	0.5	YE	7474	Incremental Encoder Direction Signal	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	YE / WH	1695	4WD Locked Range Indicator Control	II	—
10	0.5	BN	1560	Neutral Indicator Control	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	GY / BK	1570	Front Axle Actuator Control	II	—
13	4	YE / VT	1553	Transfer Case Motor Counter Clockwise Control	III	—
14	—	—	—	Not Occupied	—	—
15	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
16	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
17	—	—	—	Not Occupied	—	—
18	0.5	WH / BU	5986	Serial Data Communication Enable	II	—
19	0.5	BU / GY	7473	Incremental Encoder Impulse Signal	II	—
20	0.5	WH / RD	7477	Gear Position Sensor 5V Reference	II	—

K69 Transfer Case Control Module (NP0/NQH) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21 - 23	—	—	—	Not Occupied	—	—
24	0.5	GN	953	Shield	II	—
25	2.5	BK	4450	Ground	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	GN	951	Shield	II	—
28 - 29	—	—	—	Not Occupied	—	—
30	0.5	YE / BK	7478	Gear Position Sensor Low Reference	II	—
31	0.5	WH / GN	7475	Incremental Encoder Sensor 8V Reference	II	—
32	—	—	—	Not Occupied	—	—
33	0.75	BK	952	Transfer Case Lock Solenoid 12V	II	—
34	0.75	YE / BN	1569	Transfer Case Lock Solenoid Valve Control	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	VT	7476	Incremental Encoder Sensor Low Reference	II	—
37	—	—	—	Not Occupied	—	—
38	2.5	YE / GY	1552	Transfer Case Motor Clockwise Control	I	—

K71 Transmission Control Module (MQB)



4024881

Connector Part Information

Harness Type: Engine
OEM Connector: 34822-0243
Service Connector: 19329822
Description: 66 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

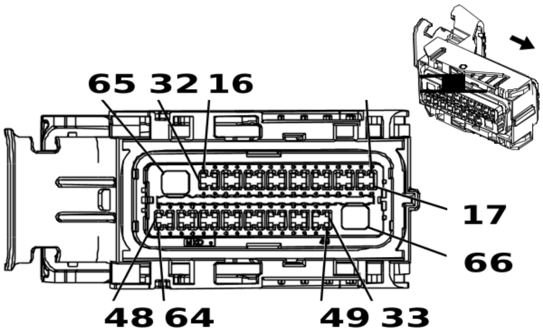
K71 Transmission Control Module (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	II	—
2	0.5	GY / GN	6403	Clutch Solenoid Valve D Control	II	—
3	0.5	WH / BU	4507	Transmission Clutch H Control	II	—
4	0.5	WH	4508	Transmission Clutch G Control	II	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	II	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	II	—
9 - 11	—	—	—	Not Occupied	—	—
12	0.5	GN / YE	6353	Input Speed Signal	II	—
13	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	II	—
14	0.5	GY / BU	6358	Output Speed Signal	II	—
15	0.5	BN / WH	6254	Transmission Input Speed Sensor Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	II	—
18	0.5	YE / BN	6404	Clutch Solenoid Valve E Control	II	—
19	0.5	GY	6402	Clutch Solenoid Valve C Control	II	—
20	0.5	VT	4509	Transmission Clutch F Control	II	—
21	—	—	—	Not Occupied	—	—
22	0.5	GN / BK	7819	Default Disable Solenoid Control	II	—

K71 Transmission Control Module (MQB) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	—	—	—	Not Occupied	—	—
24	0.5	GN / WH	2968	Transmission Auxiliary Fluid Pump Control	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	II	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
38	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	II	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
52	—	—	—	Not Occupied	—	—
53	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
54	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
55 - 62	—	—	—	Not Occupied	—	—
63	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	II	—
64	0.5	GN / YE	5724	Ignition Mode Switch Mode Control	II	—
65	1.5	BK / WH	451	Signal Ground	I	—
66	1.5	RD / GN	1840	Battery Positive Voltage	I	—

K71 Transmission Control Module (MQE+L3B)



4024881

Connector Part Information

Harness Type: Engine
OEM Connector: 35309373
Service Connector: 19330900
Description: 66 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (LT BU)	J-38125-215A

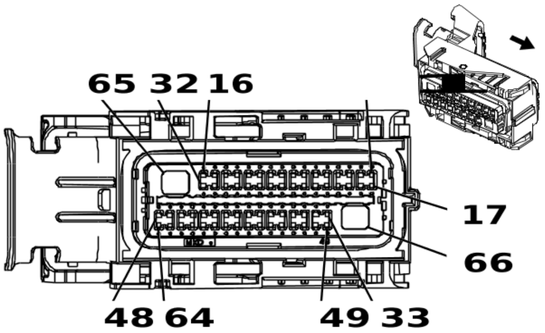
K71 Transmission Control Module (MQE+L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	4507	Transmission Clutch H Control	II	—
2	0.5	BU	6401	Clutch Solenoid Valve B Control	II	—
3	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	II	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	II	—
9 - 12	—	—	—	Not Occupied	—	—
13	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	II	—
14	0.5	GY / BU	6358	Output Speed Signal	II	—
15	0.5	BN / WH	6254	Transmission Input Speed Sensor Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	WH	4508	Transmission Clutch G Control	II	—
18	0.5	BN	6400	Clutch Solenoid Valve A Control	II	—
19	0.5	GY	6402	Clutch Solenoid Valve C Control	II	—
20	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	II	—
21	0.5	GN / WH	6380	Torque Converter Clutch Enable Solenoid Valve A Control	II	—
22	0.5	YE / BN	6210	Torque Converter Clutch Enable Solenoid Valve B Control	II	—
23	—	—	—	Not Occupied	—	—

K71 Transmission Control Module (MQE+L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	WH / GY	4578	Surge Accumulator Solenoid Valve Low Side Control	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	II	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
38	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	II	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
52	—	—	—	Not Occupied	—	—
53	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
54	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
55 - 62	—	—	—	Not Occupied	—	—
63	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	II	—
64	0.5	BU / WH	3338	Transmission Internal Mode Switch Mode Control X	II	—
65	1.5	BK / WH	451	Signal Ground	I	—
66	1.5	RD / GN	1840	Battery Positive Voltage	I	—

K71 Transmission Control Module (MQE+L84)



4024881

Connector Part Information

Harness Type: Engine
OEM Connector: 35309373
Service Connector: 19330900
Description: 66 <p01>-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-213
II	19354746	J-35616-64B (L-BU)	J-38125-215A
III	—	J-35616-35 (VT)	J-38125-215A

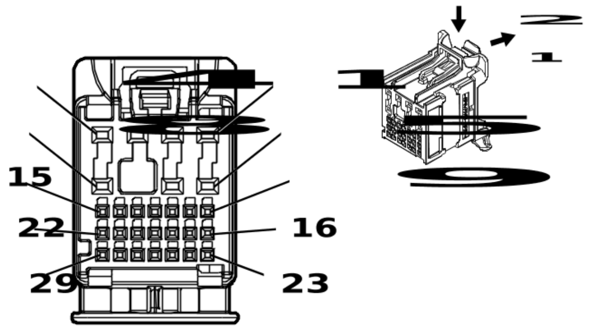
K71 Transmission Control Module (MQE+L84)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	4507	Transmission Clutch H Control	II	—
2	0.5	BU	6401	Clutch Solenoid Valve B Control	II	—
3	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	II	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	II	—
9 - 12	—	—	—	Not Occupied	—	—
13	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	II	—
14	0.5	GY / BU	6358	Output Speed Signal	II	—
15	0.5	BN / WH	6254	Transmission Input Speed Sensor Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	WH	4508	Transmission Clutch G Control	II	—
18	0.5	BN	6400	Clutch Solenoid Valve A Control	II	—
19	0.5	GY	6402	Clutch Solenoid Valve C Control	II	—
20	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	II	—
21	0.5	GN / WH	6380	Torque Converter Clutch Enable Solenoid Valve A Control	II	—
22	0.5	YE / BN	6210	Torque Converter Clutch Enable Solenoid Valve B Control	II	—

K71 Transmission Control Module (MQE+L84) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	—	—	—	Not Occupied	—	—
24	0.5 0.5 0.5	WH / GY WH / GY WH / GY	4578 4578 4578	Surge Accumulator Solenoid Valve Low Side Control Surge Accumulator Solenoid Valve Low Side Control Surge Accumulator Solenoid Valve Low Side Control	II I II	— — —
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	II	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
38	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	II	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
52	—	—	—	Not Occupied	—	—
53	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
54	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
55 - 62	—	—	—	Not Occupied	—	—
63	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	II	—
64	0.5	BU / WH	3338	Transmission Internal Mode Switch Mode Control X	II	—
65	1.5	BK / WH	451	Signal Ground	III	—
66	1.5	RD / GN	1840	Battery Positive Voltage	III	—

K73 Telematics Communication Interface Control Module X1 (UE1)



4496253

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 160014-0014
Service Connector: 13534974
Description: 29 <p01>-Way F 0.5 NANO, 1.2 MCON Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-16 (LT GN)	J-38125-559

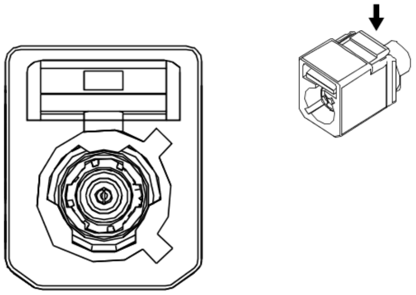
K73 Telematics Communication Interface Control Module X1 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / BU	3240	Battery Positive Voltage	II	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK / WH	2751	Signal Ground	II	—
5	—	—	—	Not Occupied	—	—
6	0.35	GN / BK	2515	Telematics Switch Supply Voltage	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	BK / WH	2751	Signal Ground	II	—
9	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—
10	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
11	0.35	GN / WH	2514	Telematics Switch Signal	I	—
12	0.35	WH / BU	5986	Serial Data Communication Enable	I	—
13	0.35	Bare	1792	Low Reference	I	—
14	0.35	BK / GY	5152	Voice Recognition Audio [-] Control	I	—
15	0.35	GY / YE	5149	Voice Recognition Audio Signal	I	—
16	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—
17	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
18	—	—	—	Not Occupied	—	—
19	0.35	YE / VT	2516	Telematics Switch Green LED Indicator Control	I	—
20	0.35	Bare	1782	Low Reference	I	—
21	0.35	BK / BN	654	Cellular Telephone Microphone Low Reference	I	—
22	0.35	BU	655	Cellular Telephone Microphone Signal	I	—

K73 Telematics Communication Interface Control Module X1 (UE1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.35	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
24 - 25	—	—	—	Not Occupied	—	—
26	0.35	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
27	—	—	—	Not Occupied	—	—
28	0.35	GY / WH	7211	Ethernet Bus 4 [+]	I	—
29	0.35	GY	7210	Ethernet Bus 4 [-]	I	—

K73 Telematics Communication Interface Control Module X5 (UE1)



3963611

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13591273
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(VT)

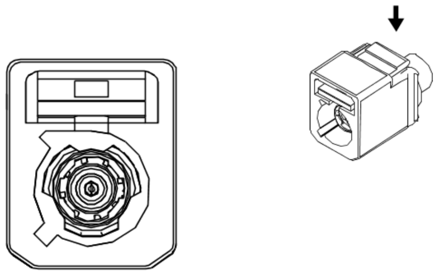
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K73 Telematics Communication Interface Control Module X5 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(Cell only) Coaxial Antenna Cell Phone Signal	I	—

K73 Telematics Communication Interface Control Module X7 (UE1)



Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13591276
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BN)

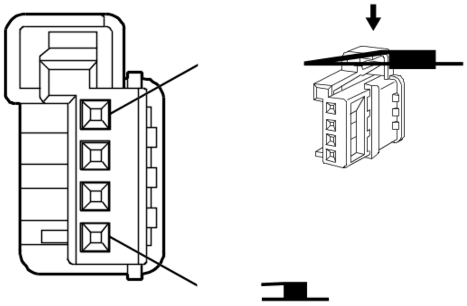
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K73 Telematics Communication Interface Control Module X7 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	—

K77 Remote Control Door Lock Receiver



2179793

Connector Part Information

Harness Type: Body
OEM Connector: 10768790
Service Connector: 84724190
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

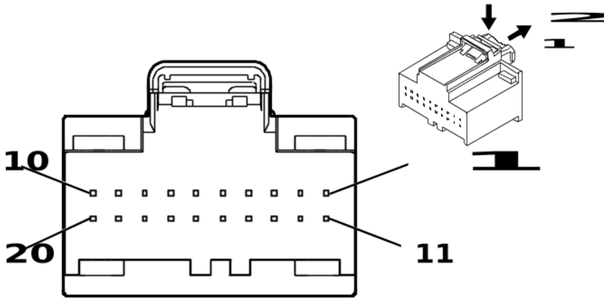
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K77 Remote Control Door Lock Receiver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	3273	Remote Control Door Lock Receiver Low Reference	I	—
2	0.35	YE / GN	3274	Remote Control Door Lock Receiver Transmit Signal	I	—
3	0.35	BU / WH	3275	Remote Control Door Lock Receiver Receive Signal	I	—
4	0.35	GY / WH	3272	Remote Control Door Lock Receiver Control	I	—

K84 Keyless Entry Control Module X1 (BTM)



5109514

Connector Part Information

Harness Type: Body
OEM Connector: 35162720
Service Connector: 13525992
Description: 20 <p01>-Way F 0.64 Series(BN)

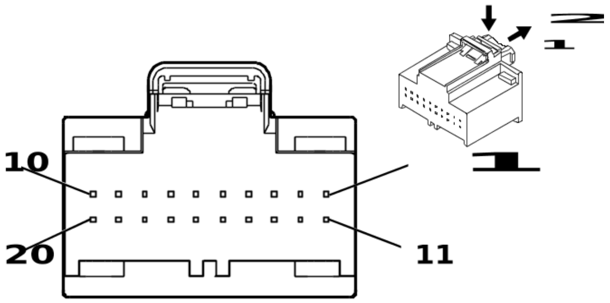
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (LT BU)	J-38125-215A

K84 Keyless Entry Control Module X1 (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / VT	1601	Steering Column Lock Signal	I	—
2	0.5	RD / YE	4340	Battery Positive Voltage	I	—
3	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	VT / YE	4	Accessory Ignition Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	GY / GN	4083	Retained Accessory Power Relay 2 Coil Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	WH / YE	3574	Driver Door Open Switch Signal	I	—
10	0.35	YE / BU	4086	Ignition Mode Switch Challenge Active Signal	I	—
11	0.35	GN / BK	3558	Passive Start Switch Signal 2	I	—
12	0.35	BK / GY	3559	Passive Start Switch 2 Low Reference	I	—
13	0.35	VT / BK	3	Run/Crank Ignition 1 Voltage	I	—
14	0.5	BK / WH	1151	Signal Ground	I	—
15	0.35	GY / BK	3555	Interior Passive Entry Antenna 2 Low Signal	I	—
16	0.35	BN / BK	3552	Interior Passive Entry Antenna 1 High Signal	I	—
17	0.35	WH	3553	Interior Passive Entry Antenna 1 Low Signal	I	—
18 - 19	—	—	—	Not Occupied	—	—
20	0.35	BU	3554	Interior Passive Entry Antenna 2 High Signal	I	—

K84 Keyless Entry Control Module X2 (BTM)



5109537

Connector Part Information

Harness Type: Body
OEM Connector: 35165309
Service Connector: 13525991
Description: 20 <p01>-Way F 0.64 Series(GY)

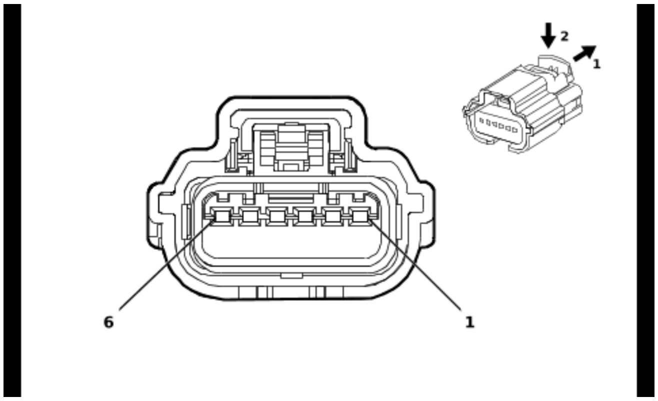
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (LT BU)	J-38125-215A

K84 Keyless Entry Control Module X2 (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / GY	6158	Right Rear Door Handle Switch Signal	I	—
2	0.35	BN / YE	6157	Left Rear Door Handle Switch Signal	I	—
3 - 5	—	—	—	Not Occupied	—	—
6	0.5	VT	3560	Driver Door Passive Entry Antenna High Signal	I	—
7	0.5	VT / GY	3561	Driver Door Passive Entry Antenna Low Signal	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	GN / BK	3563	Passenger Door Passive Entry Antenna Low Signal	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	VT / WH	3571	Passenger Door Handle Switch Signal	I	—
12	0.35	GN / WH	3570	Driver Door Handle Switch Signal	I	—
13 - 15	—	—	—	Not Occupied	—	—
16	0.5	BN / GN	3568	Rear Closure Passive Entry Antenna High Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	GN / GY	3569	Rear Closure Passive Entry Antenna Low Signal	I	—
19	—	—	—	Not Occupied	—	—
20	0.5	GN / YE	3562	Passenger Door Passive Entry Antenna High Signal	I	—

K85 Passenger Presence Module



5157678

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31404-7132
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 64 Series, Sealed(BK)

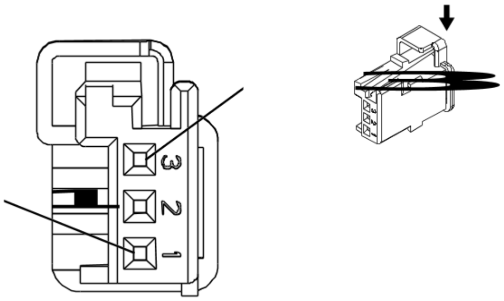
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K85 Passenger Presence Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / GN	4440	Battery Positive Voltage	I	—
2	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK / WH	2551	Signal Ground	I	—
5	0.5	GY / OG	3946	Passenger Automatic Locking Retractor Switch Low Reference	I	—
6	0.5	OG / BN	3947	Passenger Automatic Locking Retractor Switch Signal	I	—

K89 Immobilizer Control Module (-AZ3)



4218883

Connector Part Information

Harness Type: Floor Console
OEM Connector: 10763117
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

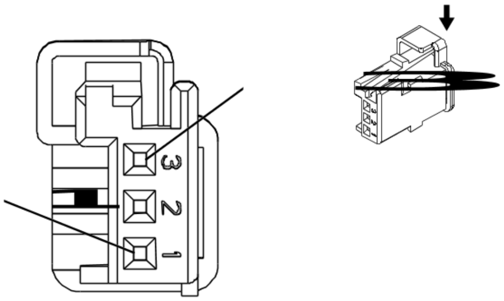
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K89 Immobilizer Control Module (-AZ3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	—
2	0.35	GN / VT	7533	Immobilizer LIN Bus 1	I	—
3	0.5	GY / BK	3276	Immobilizer Control Module Control	I	—

K89 Immobilizer Control Module (AZ3)



4218883

Connector Part Information

Harness Type: Front Center Seat
OEM Connector: 10763117
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

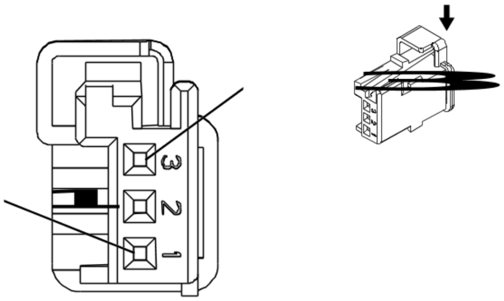
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K89 Immobilizer Control Module (AZ3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	—
2	0.35	GN / VT	7533	Immobilizer LIN Bus 1	I	—
3	0.35	GY / BK	3276	Immobilizer Control Module Control	I	—

K89 Immobilizer Control Module (-BTM)



4218883

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 953697-1
Service Connector: 19333317
Description: 3 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

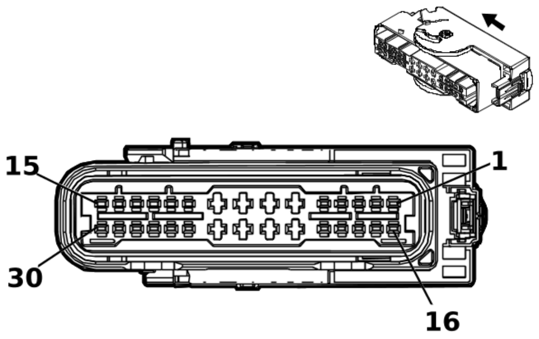
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K89 Immobilizer Control Module (-BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	—
2	0.5	GN / VT	7533	Immobilizer LIN Bus 1	I	—
3	0.5	GY / BK	3276	Immobilizer Control Module Control	I	—

K111 Fuel Pump Driver Control Module (L3B/L82/L84/L87/LV3)



3240109

Connector Part Information

Harness Type: Chassis
OEM Connector: 2-2109446-2
Service Connector: 85140064
Description: 30 <p01>-Way F 1.5, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19329958	J-35616-2A (GY)	J-38125-11A
II	—	J-35616-35 (VT)	J-38125-557

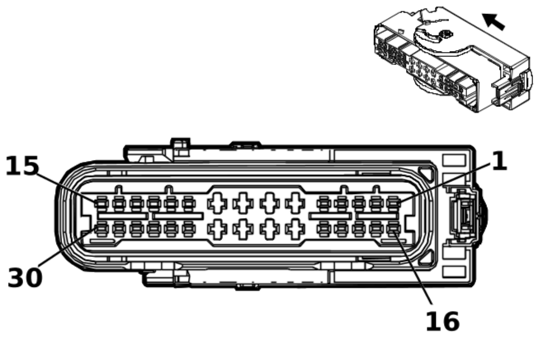
K111 Fuel Pump Driver Control Module (L3B/L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	2.5	RD / VT	1940	Battery Positive Voltage	II	—
8	2.5	GY	120	Fuel Pump Control	II	—
9	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	II	—
10	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—
11	0.5	BU / WH	890	Fuel Tank Pressure Sensor Signal	I	—
12	—	—	—	Not Occupied	—	—
13	0.5	BU / VT	1589	Primary Fuel Level Sensor Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
16	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	GN / GY	465	Fuel Pump Primary Relay Control	I	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH	1310	EVAP Vent Solenoid Valve Control	II	—
22	2.5	BK	1750	Ground	II	—
23	0.5	BN	7444	Fuel Pump Assembly Shield Ground	II	—
24	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	II	—
25	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
26 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	I	—

K111 Fuel Pump Driver Control Module (L3B/L82/L84/L87/LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	—	—	—	Not Occupied	—	—
30	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—

K111 Fuel Pump Driver Control Module (LM2)



3240109

Connector Part Information

Harness Type: Chassis
OEM Connector: 2-2109446-2
Service Connector: 85140064
Description: 30 <p01>-Way F 1.5, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19329958	J-35616-2A (GY)	J-38125-11A
II	—	J-35616-35 (VT)	J-38125-557

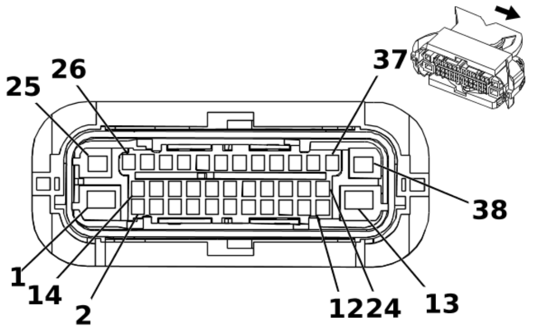
K111 Fuel Pump Driver Control Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	6862	Water In Fuel Sensor Voltage Reference	I	—
2	0.5	BU / YE	6861	Water In Fuel Sensor Signal	I	—
3	0.5	BK / BU	6863	Water In Fuel Sensor Low Reference	I	—
4	0.5	BN / VT	455	Fuel Filter Temperature Signal	I	—
5 - 6	—	—	—	Not Occupied	—	—
7	2.5	RD / VT	1940	Battery Positive Voltage	II	—
8	2.5	GY	120	Fuel Pump Control	II	—
9	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	II	—
10	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—
11	0.5	BU / WH	890	Fuel Tank Pressure Sensor Signal	I	—
12	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
13	0.5	BU / VT	1589	Primary Fuel Level Sensor Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
16	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
17	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	I	—
18	0.5	GN / GY	465	Fuel Pump Primary Relay Control	I	—
19	0.5	BK / VT	412	Fuel Filter Temperature Sensor Low Reference	I	—
20	—	—	—	Not Occupied	—	—
21	0.5	WH	1310	EVAP Vent Solenoid Valve Control	II	—
22	2.5	BK	1750	Ground	II	—

K111 Fuel Pump Driver Control Module (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.5	BN	7444	Fuel Pump Assembly Shield Ground	II	—
24	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	II	—
25	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
26	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	I	—
27	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
28	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	I	—
29	—	—	—	Not Occupied	—	—
30	0.5	BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—

K115 Reductant Control Module (LM2)



3240110

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13582126
Service Connector: Service by Harness - See Part Catalog
Description: 38 <p01>-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed(BK with BK Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

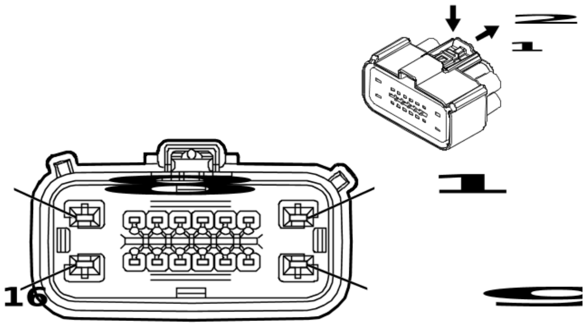
K115 Reductant Control Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	BK	3921	Diesel Exhaust Fluid Heater Control 1	I	—
2	1	BN	3676	Diesel Exhaust Fluid Heating Tank 2 Heater Control	I	—
3	—	—	—	Not Occupied	—	—
4	1	YE	3677	Diesel Exhaust Fluid Reservoir Heater Control	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	BK	3244	Diesel Exhaust Fluid Tank Temperature Sensor Signal	I	—
7	0.5	BK	7290	Diesel Exhaust Fluid Sensor Voltage Reference 1	I	—
8	0.5	BN	7284	Diesel Exhaust Fluid Liquid Quality Temperature Signal	I	—
9	0.5	BK	8434	Diesel Exhaust Fluid Sensor Low Reference	I	—
10	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
11	1	YE	3876	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 3	I	—
12	—	—	—	Not Occupied	—	—
13	3	WH	1651	Signal Ground	I	—
14	1	BN	2936	Diesel Exhaust Fluid Heating Tank 2 Heater Control Low	I	—
15	—	—	—	Not Occupied	—	—
16	1	BU	4318	Diesel Exhaust Fluid Tank Heater Low Control	I	—
17	0.5	BK	5985	Accessory Wake-Up Serial Data	I	—

K115 Reductant Control Module (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.5	BN	3245	Diesel Exhaust Fluid Tank Temperature Sensor Low Reference	I	—
19	0.5	BN	3106	Diesel Exhaust Fluid Pressure Sensor 5 Volt Reference	I	—
20	0.5	BU	3108	Diesel Exhaust Fluid Pressure Sensor Signal	I	—
21	0.5	BU	3107	Diesel Exhaust Fluid Pressure Sensor Low Reference	I	—
22	0.5	BN	2500	High Speed GMLAN Serial Data [+] 1	I	—
23	0.5	BK	2501	High Speed GMLAN Serial Data [-] 1	I	—
24	0.5	BN	3875	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 2	I	—
25	2	BK	1651	Signal Ground	I	—
26	1	WH	3199	Diesel Exhaust Fluid Pressure Line Heater Control	I	—
27	—	—	—	Not Occupied	—	—
28	1	BN	4319	Diesel Exhaust Fluid Line Heater Low Control	I	—
29	0.5	BK	4320	Powertrain Sensor Bus Enable	I	—
30	0.5	BN	439	Run/Crank Ignition 1 Voltage	I	—
31	0.5	BU	4498	High Speed GMLAN Serial Data [+] 7	I	—
32	0.5	BU	4498	High Speed GMLAN Serial Data [+] 7	I	—
33	0.5	BN	4499	High Speed GMLAN Serial Data [-] 7	I	—
34	0.5	BN	4499	High Speed GMLAN Serial Data [-] 7	I	—
35	0.5	BN	2501	High Speed GMLAN Serial Data [-] 1	I	—
36	1	BU	2937	Diesel Exhaust Fluid Pump Motor Stator Low Reference	I	—
37	1	WH	3103	Diesel Exhaust Fluid Smart Pump Control	I	—
38	2	RD	3440	Battery Positive Voltage	I	—

K133 Trailer Brake Power Control Module (JL1)



4624589

Connector Part Information

Harness Type: Chassis
OEM Connector: 34985-4016
Service Connector: 13599889
Description: 16 <p01>-Way F 1.5, 2.8 MX Series, Sealed(GY)

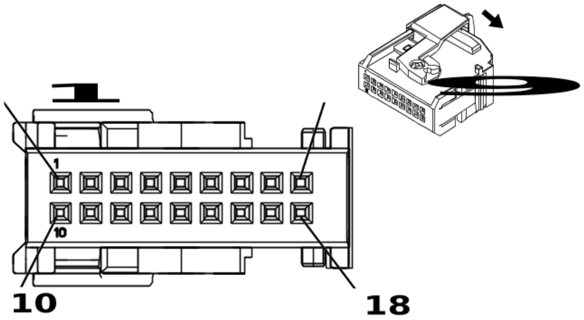
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579751	J-35616-35 (VT)	J-38125-12A
II	19300432	J-35616-2A (GY)	J-38125-217

K133 Trailer Brake Power Control Module (JL1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / VT	1242	Battery Positive Voltage	I	—
2	1	WH / BK	2223	Trailer Brake Apply Signal	II	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	YE / BK	2224	Trailer Brake Enable Signal	II	—
6 - 7	—	—	—	Not Occupied	—	—
8	2.5	BU	47	Trailer Auxiliary Control	I	—
9	2.5	BK	1450	Ground	I	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	GN / BU	2733	Electronic Brake Control Module LIN Bus 2	II	—
13 - 16	—	—	—	Not Occupied	—	—

K157 Video Processing Control Module X1 (UVI/UVS)



4329088

Connector Part Information

Harness Type: Body
OEM Connector: 33168840
Service Connector: 84976200
Description: 18 <p01>-Way F Micro-Quadlock Series(BK)

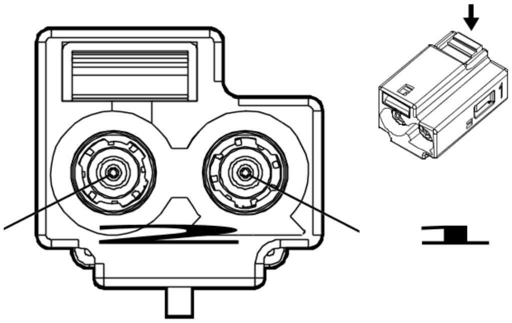
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (LT BU)	J-38125-12A

K157 Video Processing Control Module X1 (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	1640	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK / WH	2751	Signal Ground	I	—
4 - 8	—	—	—	Not Occupied	—	—
9	0.35	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
10	0.35	RD / VT	1640	Battery Positive Voltage	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	BK / WH	2751	Signal Ground	I	—
13 - 18	—	—	—	Not Occupied	—	—

K157 Video Processing Control Module X3 (UVI/UVS)



4877749

Connector Part Information

Harness Type: Body
OEM Connector: 13509682
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2 <p01>-Way F Coax Type(RD)

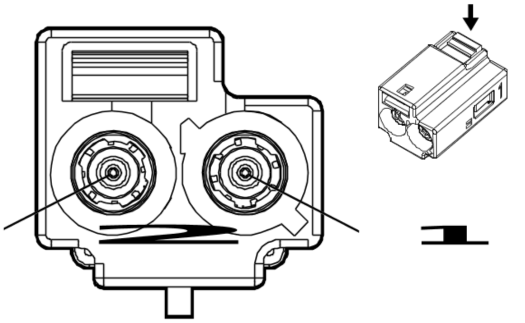
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K157 Video Processing Control Module X3 (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	Coax Cable	—	Combined Camera Video Signal #2	I	—
2	—	Coax Cable	—	Rear Vision Camera Signal	I	UVI

K157 Video Processing Control Module X4 (UVI/UVS)



4883153

Connector Part Information

Harness Type: Body COAX
OEM Connector: 13509683
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2 <p01>-Way F Coax Type(BG)

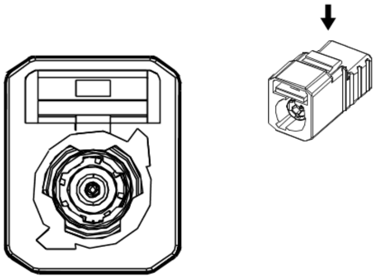
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K157 Video Processing Control Module X4 (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	Coax Cable	—	Trailer 2 Rear Vision Camera Coaxial Video Signal	II	—
2	—	Coax Cable	—	Cargo Area Camera Video Signal	I	—

K157 Video Processing Control Module X5 (UVI)



4883187

Connector Part Information

Harness Type: Body COAX
OEM Connector: 13598487
Service Connector: Service by Cable Assembly — See Part Catalog
Description: F Coax Type

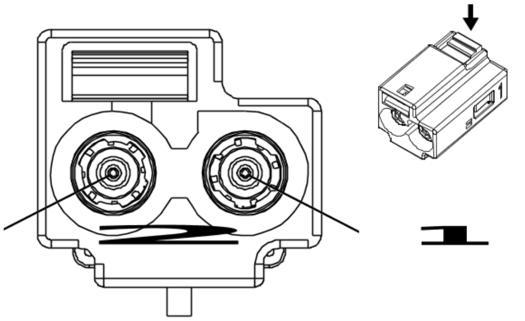
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K157 Video Processing Control Module X5 (UVI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Front Vision Camera 1 Coaxial Video Signal	I	—

K157 Video Processing Control Module X5 (UVS)



4167417

Connector Part Information

Harness Type: Body
OEM Connector: 33211234
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2 <p01>-Way F Coax Type(GN)

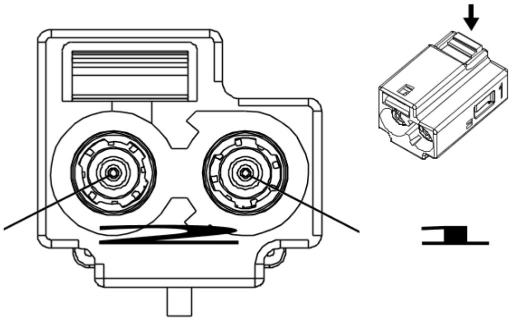
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K157 Video Processing Control Module X5 (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	Coax Cable	—	Left Sideview Camera Video Signal	I	—
2	—	Coax Cable	—	Cargo Area Camera Video Signal	I	—

K157 Video Processing Control Module X6 (UVS)



4217355

Connector Part Information

Harness Type: Body
OEM Connector: 13590279
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2 <p01>-Way F Coax Type(BN)

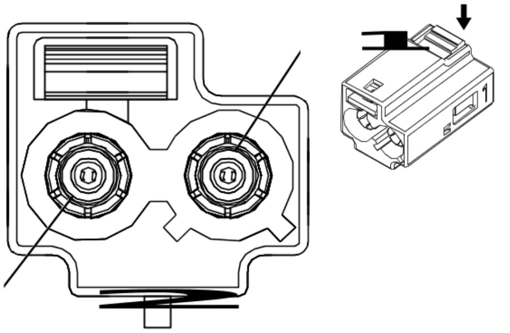
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K157 Video Processing Control Module X6 (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	Coax Cable	—	Right Sideview Camera Video Signal	I	—
2	—	Coax Cable	—	Trailer 2 Rear Vision Camera Coaxial Video Signal	I	—

K157 Video Processing Control Module X7 (UVS)



3969442

Connector Part Information

Harness Type: Body
OEM Connector: 13581975
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2 <p01>-Way F Coax Type(CU)

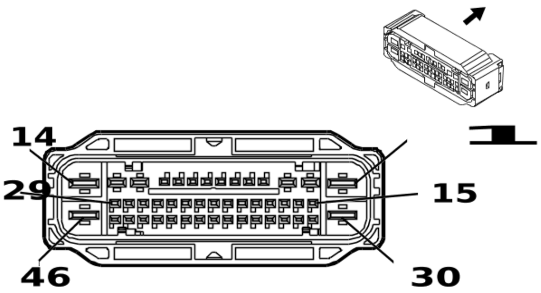
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K157 Video Processing Control Module X7 (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	Coax Cable	—	Front Vision Camera #1 Signal	I	—
2	—	Coax Cable	—	Trailer Rear Vision Camera Coaxial Video Signal	I	—

K160 Brake System Control Module



4162046

Connector Part Information

Harness Type: Body
OEM Connector: 33222138
Service Connector: 19333026
Description: 46 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-212
II	19370818	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-215A

K160 Brake System Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BK	150	Ground	III	—
2	2.5	WH	2001	Left Park Brake Motor Apply Control	I	—
3	2.5	GY / BK	4369	Left Park Brake Motor Low Reference	I	—
4	0.5	GY / WH	7064	Left Front Wheel Speed Sensor Control	II	—
5	0.5	GY	830	Left Front Wheel Speed Sensor Signal	II	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.5	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
10	0.5	GY / BN	7065	Right Front Wheel Speed Sensor Control	II	—
11	0.5	YE	872	Right Front Wheel Speed Sensor Signal	II	—
12	2.5	GN / VT	1988	Right Park Brake Motor Apply Control	I	—
13	2.5	GY	4368	Right Park Brake Motor Low Reference	I	—
14	6	RD / YE	442	Battery Positive Voltage	III	—
15	0.5	GY / BK	7127	Left Rear Wheel Speed Sensor Control	II	—
16	0.5	BU	884	Left Rear Wheel Speed Sensor Signal	II	—
17	0.5	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	II	—
18	—	—	—	Not Occupied	—	—
19	0.35	GN / GY	817	Vehicle Speed Signal	II	—
20 - 22	—	—	—	Not Occupied	—	—
23	0.35	GN / YE	2731	Electronic Brake Control Module LIN Bus 1	II	—
24	—	—	—	Not Occupied	—	—

K160 Brake System Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
26	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
27	0.35	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
28	0.5	GY / YE	7128	Right Rear Wheel Speed Sensor Control	II	—
29	0.5	VT	882	Right Rear Wheel Speed Sensor Signal	II	—
30	6	BK	2250	Ground	III	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.35	GN / BU	2733	Electronic Brake Control Module LIN Bus 2	II	—
36	0.75	WH / BK	2223	Trailer Brake Apply Signal	II	—
37	0.5	YE / BK	2224	Trailer Brake Enable Signal	II	—
38	0.5	GN / GY	333	Brake Fluid Level Signal	II	—
39	0.5	WH	1612	Left Front Brake Pad Wear Sensor 3 Signal	II	—
40	—	—	—	Not Occupied	—	—
41	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
42	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
43	—	—	—	Not Occupied	—	—
44	0.5	GN / YE	1616	Rear Brake Pad Wear Sensor Signal	II	—
45	—	—	—	Not Occupied	—	—
46	6	RD / VT	1640	Battery Positive Voltage	III	—

K166L Multifunction LED Control Module - Left Headlamp (GFD)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K166L Multifunction LED Control Module - Left Headlamp (GFD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7538	Left Front DRL Control	I	—
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	YE	—	—	I	—
5	—	WH	—	—	I	—
6	—	BK	—	—	I	—
7	—	BU / VT	—	—	I	—
8	—	GY / BU	—	—	I	—
9	—	BK	—	—	I	—
10	—	BK	150	Ground	I	—
11	—	BK	2227	Left Headlamp Control	I	—
12	—	BK	711	Left Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	—	—	I	—
17	—	BK	6568	Front Turn Signal Lamp Feedback Signal	I	—
18	—	BK	712	Left Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—

K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 32 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7538	Left Front DRL Control	I	—
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	YE	—	—	I	—
5	—	WH	—	—	I	—
6	—	BK	—	—	I	—
7	—	BU / VT	—	—	I	—
8	—	GY / BU	—	—	I	—
9	—	BK	—	—	I	—
11	—	BK	2227	Left Headlamp Control	I	—
12	—	WH	711	Left Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	6568	Front Turn Signal Lamp Feedback Signal	I	—
17	—	BK	709	Left Park Lamp Control	I	—
18	—	BK	712	Left Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—
21	—	BK	—	—	I	—
22	—	BK	—	—	I	—
23	—	BK	—	—	I	—
24	—	BK	150	Ground	I	—
25	—	BK	—	—	I	—
26	—	BK	—	—	I	—
27	—	BK	—	—	I	—
29	—	BK	—	—	I	—
31	—	BK	—	—	I	—

K166R Multifunction LED Control Module - Right Headlamp (GFD)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K166R Multifunction LED Control Module - Right Headlamp (GFD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7539	Right Front DRL Control	I	—
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	BK	—	—	I	—
5	—	BK	—	—	I	—
6	—	BK	—	—	I	—
7	—	BK / BU	—	—	I	—
8	—	BU / BN	—	—	I	—
9	—	BK	—	—	I	—
10	—	BK	250	Ground	I	—
11	—	BK / GY	2226	Right Headlamp Control	I	—
12	—	BK	311	Right Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	—	—	I	—
17	—	BK	7545	Right Front Turn Signal Lamp Feedback Signal	I	—
18	—	BK	312	Right Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—

K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)

—

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 32 <p01>-Way

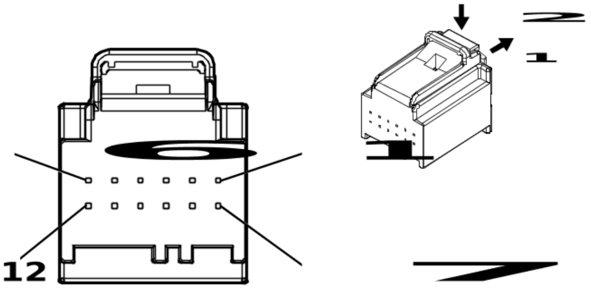
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7539	Right Front DRL Control	I	—
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	BK	—	—	I	—
5	—	BK	—	—	I	—
6	—	BK	—	—	I	—
7	—	BK / BU	—	—	I	—
8	—	BU / BN	—	—	I	—
9	—	BK	—	—	I	—
11	—	BK	2226	Right Headlamp Control	I	—
12	—	BK / GY	311	Right Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	7545	Right Front Turn Signal Lamp Feedback Signal	I	—
17	—	BK	309	Right Park Lamp Control	I	—
18	—	BK	312	Right Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—
21	—	BK	—	—	I	—
22	—	BK	—	—	I	—
23	—	BK	—	—	I	—
24	—	BK	250	Ground	I	—
25	—	BK	—	—	I	—
26	—	BK	—	—	I	—
27	—	BK	—	—	I	—
29	—	BK	—	—	I	—
31	—	BK	—	—	I	—

K182 Parking Assist Control Module X1 (UD5/UD7)



5095565

Connector Part Information

Harness Type: Body
OEM Connector: 35130710
Service Connector: 13525987
Description: 12 <p01>-Way F 0.64 Series(BK)

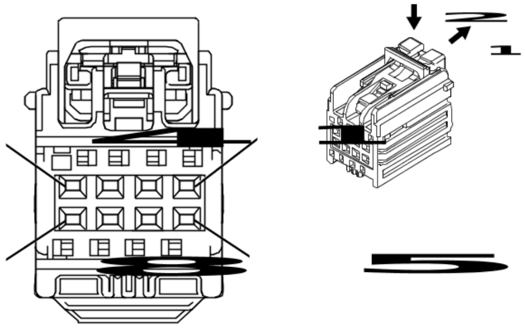
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (LT BU)	J-38125-215A

K182 Parking Assist Control Module X1 (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / GN	3140	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN / BN	5852	Rear Parking Assist Disable LED Signal	I	—
4	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
5 - 7	—	—	—	Not Occupied	—	—
8	0.35	GY / GN	2555	Rear Parking Assist Disable Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	BK / WH	1151	Signal Ground	I	—
11 - 12	—	—	—	Not Occupied	—	—

K182 Parking Assist Control Module X2 (UD5/UD7)



4280711

Connector Part Information

Harness Type: Body
OEM Connector: 33183559
Service Connector: 19355209
Description: 8 <p01>-Way F YESC Kaizen Series(GY)

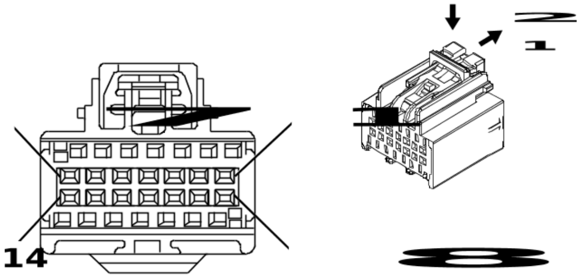
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K182 Parking Assist Control Module X2 (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—
4	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
5	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—
6	0.5	YE / BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

K182 Parking Assist Control Module X3 (UD5/UD7)



4547098

Connector Part Information

Harness Type: Body
OEM Connector: 35014564
Service Connector: 19354933
Description: 14 <p01>-Way F 0.64 Kaizen Series(BU)

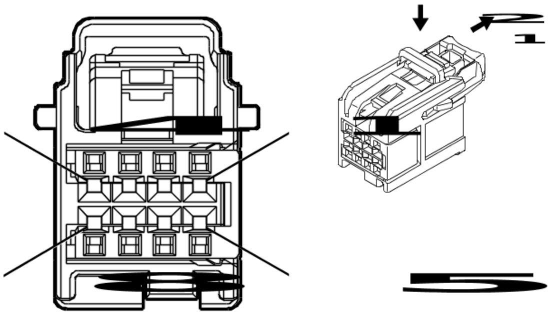
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19303553	J-35616-64B (LT BU)	J-38125-215A

K182 Parking Assist Control Module X3 (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	5213	Front Left/Right/Middle Parking Assist Sensor	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	YE / GY	5216	Left Front Middle Parking Assist Sensor	I	—
5	0.5	WH / GY	5217	Right Front Outer Parking Assist Sensor	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT / WH	5215	Left Front Outer Parking Assist Sensor	I	—
11	0.5	VT / GY	5218	Right Front Middle Parking Assist Sensor	I	—
12 - 14	—	—	—	Not Occupied	—	—

K183 UHF Short Range Low Energy Remote Control Access Transceiver (BOP)



4935776

Connector Part Information

Harness Type: Body
OEM Connector: 15526972
Service Connector: 19370429
Description: 8 <p01>-Way F 0.64 OCS Series(BK)

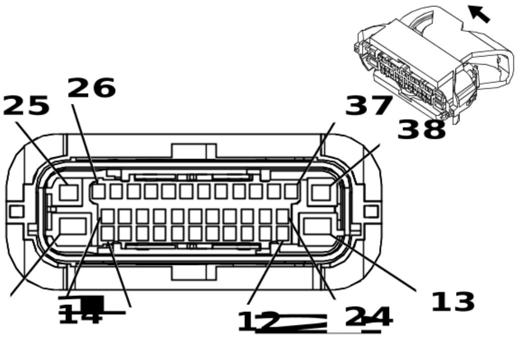
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K183 UHF Short Range Low Energy Remote Control Access Transceiver (BOP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	2738	Virtual Key Module LIN Bus 1	I	—
2	0.5	RD / YE	2340	Battery Positive Voltage	I	—
3	0.5	BK	1150	Ground	I	—
4	0.5	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
5 - 8	—	—	—	Not Occupied	—	—

K194 Rear Gate Module (QT6)



3240111

Connector Part Information

Harness Type: Endgate
OEM Connector: 13924619
Service Connector: Service by Harness - See Part Catalog
Description: 38 <p01>-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed(BK with BK Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-40 (BU)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required

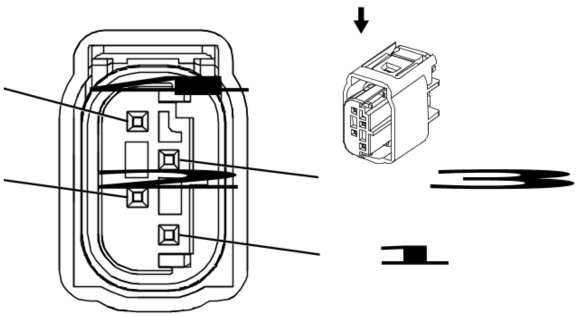
K194 Rear Gate Module (QT6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1450	Ground	II	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.5	PK / BK	4668	Rear Closure Latch Pawl Status Signal	I	—
6	0.5	GY / VT	4678	Rear Closure Latch Unlatch Status	I	—
7	0.35	GN / BK	4659	Rear Closure Open Switch Signal	I	—
8	0.35	BU / BK	4665	Rear Closure Latch Ratchet Status	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	YE	1144	Endgate Release Switch Discrete Signal Exterior	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	GY	1198	Endgate Release Switch Analog Signal Interior	I	—
13	2.5	RD / GY	7040	Battery Positive Voltage	II	—
14	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	YE / RD	7734	Rear Closure Latch 2 Ratchet Status Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	BN / RD	4683	Rear Closure Position Sensor Voltage Reference	I	—
19	0.35	BK / GN	4687	Rear Closure Position Sensor Low Reference	I	—
20	—	—	—	Not Occupied	—	—
21	0.35	BN / YE	4686	Rear Closure Position Sensor Signal 2	I	—

K194 Rear Gate Module (QT6) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.5	BU / WH	4685	Rear Closure Position Sensor Signal 1	I	—
23	0.5	WH	7735	Rear Closure Latch 2 Pawl Status Signal	I	—
24	0.5	VT	7736	Rear Closure Latch 2 Unlatch Status Signal	I	—
25	1	BN / WH	4690	Rear Closure Open/Close Motor Close Control	III	—
26	0.35	OG	7733	Rear Closure Latch 2 Sector Status Signal	I	—
27	0.5	GY / BK	1575	Rear Closure Sensor Low Reference 2	I	—
28	0.5	BK / VT	4656	Rear Closure Object Sensor Low Reference	I	—
29	—	—	—	Not Occupied	—	—
30	1	BU	1509	Rear Closure Cinch Latch Motor 2 Release Control	I	—
31	1	PK	1499	Rear Closure Cinch Latch Motor 2 Cinch Control	I	—
32	—	—	—	Not Occupied	—	—
33	1	BU / GY	4682	Rear Closure Cinch Latch Motor Release Control	I	—
34	1	BN	4681	Rear Closure Cinch Latch Motor Cinch Control	I	—
35	0.5	GN	1577	Rear Closure Clutch Control	I	—
36	0.5	OG / WH	1590	Rear Closure Clutch Low Return	I	—
37	—	—	—	Not Occupied	—	—
38	1	WH	4689	Rear Closure Open/Close Motor Open Control	III	—

K214 Trailer Tire Pressure Indicator Module (PTT)



2173574

Connector Part Information

Harness Type: Chassis
OEM Connector: 1563215-1
Service Connector: 13314098
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series, Sealed(BK)

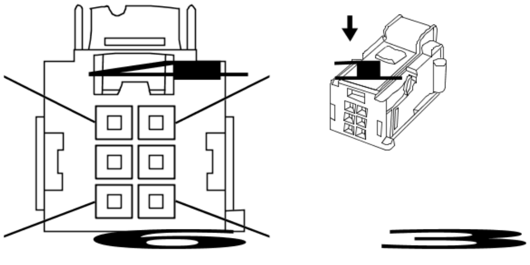
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

K214 Trailer Tire Pressure Indicator Module (PTT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / GN	1840	Battery Positive Voltage	I	—
2	0.75	BK	1750	Ground	I	—
3	0.5	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
4	0.5	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—

M4 Air Inlet Door Actuator



2426783

Connector Part Information

Harness Type: HVAC
OEM Connector: 13691690
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Series(BK)

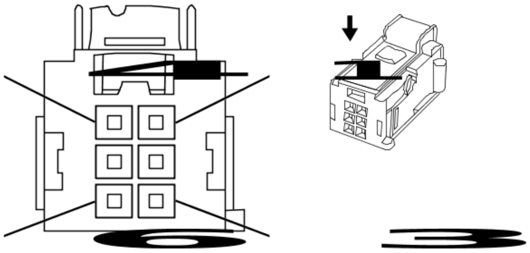
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

M4 Air Inlet Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BK	3173	Air Inlet Door Actuator Control 1	I	—
2	0.75	GY / BU	7572	HVAC Door Actuator Control	I	—
3	0.75	VT / GN	3174	Air Inlet Door Actuator Control 2	I	—
4	0.75	YE / GN	3175	Air Inlet Door Actuator Control 3	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	YE	3176	Air Inlet Door Actuator Control 4	I	—

M6 Air Temperature Door Actuator (-CJ2)



Connector Part Information

Harness Type: HVAC
OEM Connector: 13691690
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Series(BK)

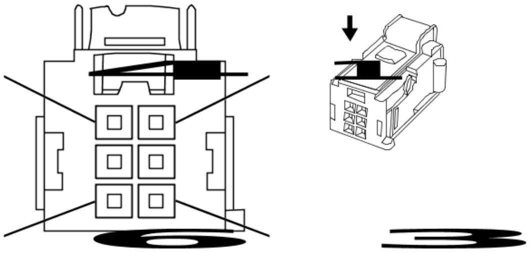
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

M6 Air Temperature Door Actuator (-CJ2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / VT	3169	Air Temperature Door Actuator Control 1	I	—
2	0.75	YE	7572	HVAC Door Actuator Control	I	—
3	0.75	BN / WH	3170	Air Temperature Door Actuator Control 2	I	—
4	0.75	BN / WH	3171	Air Temperature Door Actuator Control 3	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	WH	3172	Air Temperature Door Actuator Control 4	I	—

M6L Air Temperature Door Actuator - Left (CJ2)



Connector Part Information

Harness Type: HVAC
OEM Connector: 13691690
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Series(BK)

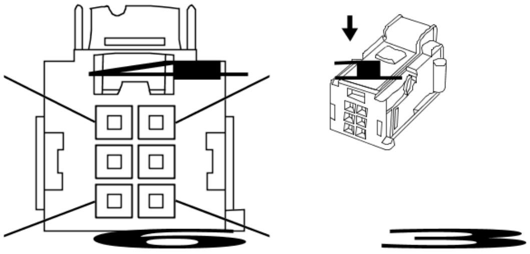
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

M6L Air Temperature Door Actuator - Left (CJ2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / VT	3169	Air Temperature Door Actuator Control 1	I	—
2	0.75	YE	7572	HVAC Door Actuator Control	I	—
3	0.75	BN / WH	3170	Air Temperature Door Actuator Control 2	I	—
4	0.75	BN / WH	3171	Air Temperature Door Actuator Control 3	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	WH	3172	Air Temperature Door Actuator Control 4	I	—

M6R Air Temperature Door Actuator - Right (CJ2)



2426783

Connector Part Information

Harness Type: HVAC
OEM Connector: 13691690
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Series(BK)

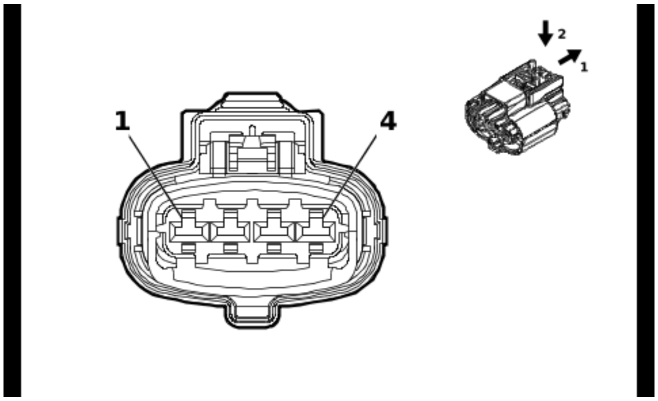
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

M6R Air Temperature Door Actuator - Right (CJ2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	3181	Passenger Air Temperature Door Actuator Control 1	I	—
2	0.75	BK / YE	7572	HVAC Door Actuator Control	I	—
3	0.35	BN / GN	3182	Passenger Air Temperature Door Actuator Control 2	I	—
4	0.35	BN	3183	Passenger Air Temperature Door Actuator Control 3	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	VT / GN	3184	Passenger Air Temperature Door Actuator Control 4	I	—

M10 Charge Air Cooler Coolant Pump (LM2)



5869064

Connector Part Information

Harness Type: Engine
OEM Connector: 35133588
Service Connector: 19371209
Description: 4 <p01>-Way F 2.8 CTS Series, Sealed(BK)

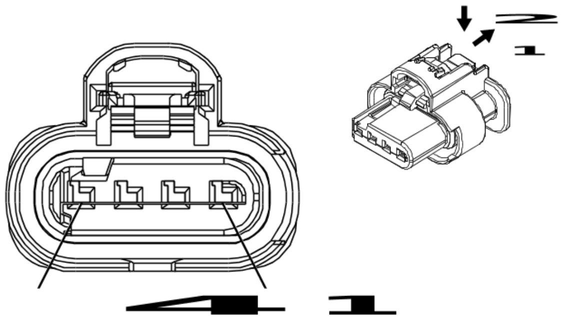
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M10 Charge Air Cooler Coolant Pump (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
4	1	BK	550	Ground	I	—

M26 Front Axle Engagement Actuator (NP0/NQH)



4210809

Connector Part Information

Harness Type: Front Axle
OEM Connector: 33390897
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

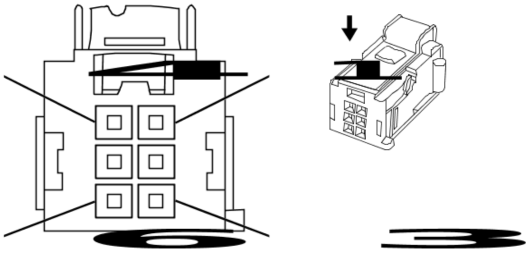
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M26 Front Axle Engagement Actuator (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GY / BK	1570	Front Axle Actuator Control	I	—
3	0.5	YE / WH	1695	4WD Locked Range Indicator Control	I	—
4	0.5	BK	4450	Ground	I	—

M37 Mode Door Actuator



2426783

Connector Part Information

Harness Type: HVAC
OEM Connector: 13691690
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Series(BK)

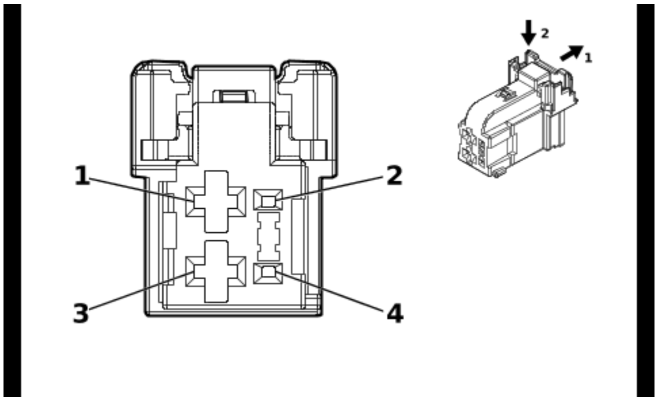
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

M37 Mode Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	3165	Mode Door Actuator Control 1	I	—
2	0.75	BN	7572	HVAC Door Actuator Control	I	—
3	0.75	BN / GN	3166	Mode Door Actuator Control 2	I	—
4	0.75	BU / BN	3167	Mode Door Actuator Control 3	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	GY	3168	Mode Door Actuator Control 4	I	—

M50D Seat Front Vertical Motor - Driver (A2K+A45)



5410027

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

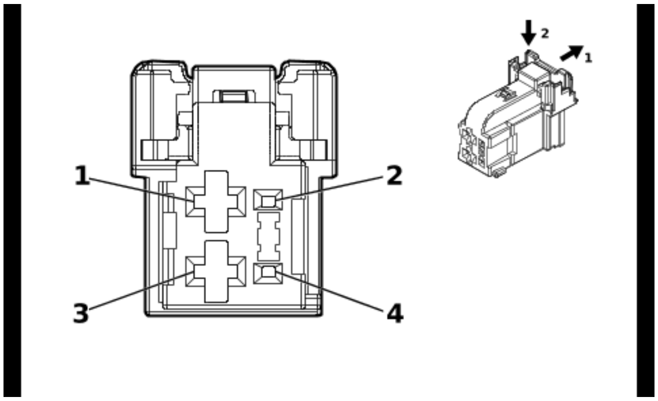
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

M50D Seat Front Vertical Motor - Driver (A2K+A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / VT	287	Driver Seat Front Vertical Motor Down Control	I	—
2	0.5	WH / RD	3298	Seat Position Sensors High Reference 2	II	—
3	1.5	GN / BN	286	Driver Seat Front Vertical Motor Up Control	I	—
4	0.5	BN / WH	557	Seat Front Vertical Motor Position Sensor Signal	II	—

M50D Seat Front Vertical Motor - Driver (A2K-A45)



5410027

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

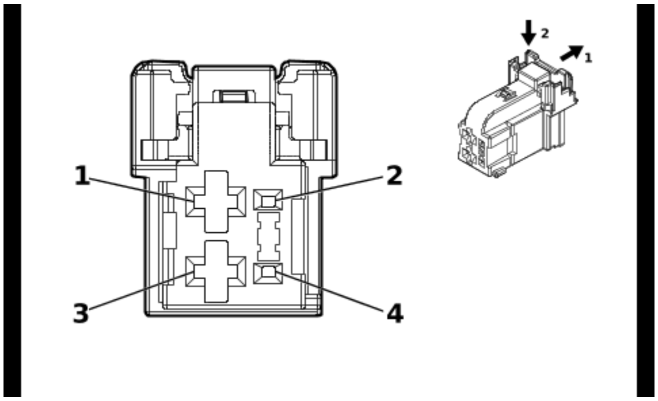
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M50D Seat Front Vertical Motor - Driver (A2K-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / VT	287	Driver Seat Front Vertical Motor Down Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / BN	286	Driver Seat Front Vertical Motor Up Control	I	—
4	—	—	—	Not Occupied	—	—

M50P Seat Front Vertical Motor - Passenger (A7K)



5410027

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

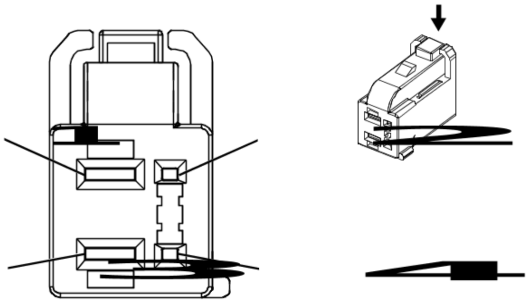
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M50P Seat Front Vertical Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / VT	297	Passenger Seat Front Vertical Motor Up Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / BU	298	Passenger Seat Front Vertical Motor Down Control	I	—
4	—	—	—	Not Occupied	—	—

M51D Seat Horizontal Motor - Driver (A2X-A45)



3683652

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

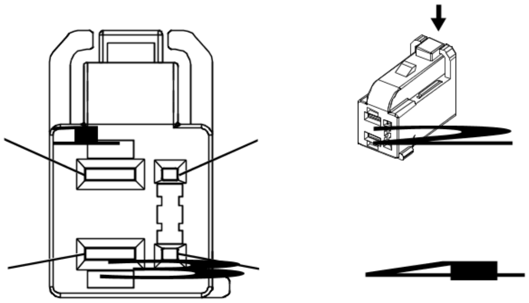
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M51D Seat Horizontal Motor - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	YE / BU	285	Driver Seat Horizontal Motor Forward Control	I	—
4	—	—	—	Not Occupied	—	—

M51D Seat Horizontal Motor - Driver (A45)



3683652

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

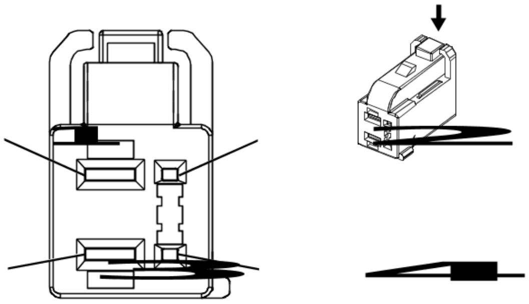
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

M51D Seat Horizontal Motor - Driver (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
2	0.5	GN	569	Seat Horizontal Motor Position Sensor Signal	II	—
3	1.5	YE / BU	285	Driver Seat Horizontal Motor Forward Control	I	—
4	0.5	WH / RD	3298	Seat Position Sensors High Reference 2	II	—

M51P Seat Horizontal Motor - Passenger (A7K)



3683652

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

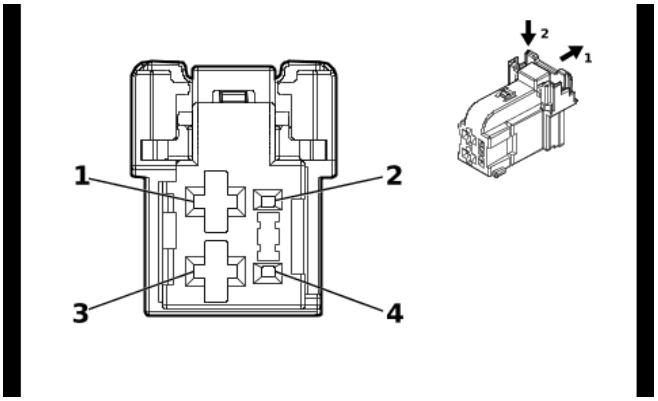
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M51P Seat Horizontal Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE / BU	290	Passenger Seat Horizontal Motor Rearward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	YE / WH	296	Passenger Seat Horizontal Motor Forward Control	I	—
4	—	—	—	Not Occupied	—	—

M55D Seat Rear Vertical Motor - Driver (A2X+A45)



5410027

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

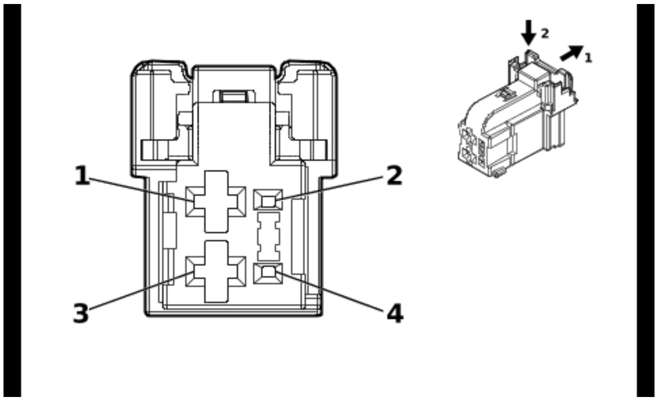
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

M55D Seat Rear Vertical Motor - Driver (A2X+A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
2	0.5	YE / BU	568	Seat Rear Vertical Motor Position Sensor Signal	II	—
3	1.5	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
4	0.5	WH / RD	3298	Seat Position Sensors High Reference 2	II	—

M55D Seat Rear Vertical Motor - Driver (A2X-A45)



5410027

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

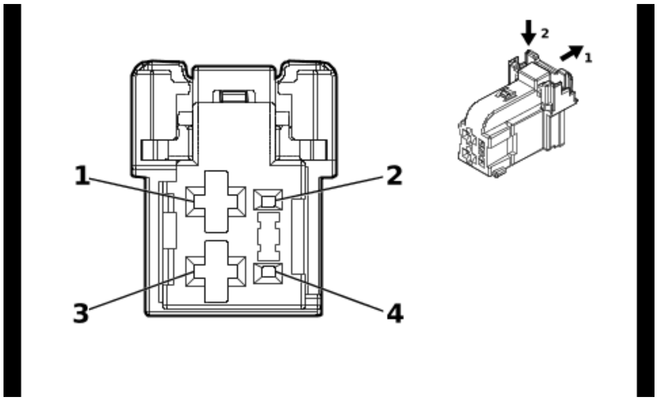
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M55D Seat Rear Vertical Motor - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
4	—	—	—	Not Occupied	—	—

M55P Seat Rear Vertical Motor - Passenger (A7K)



5410027

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

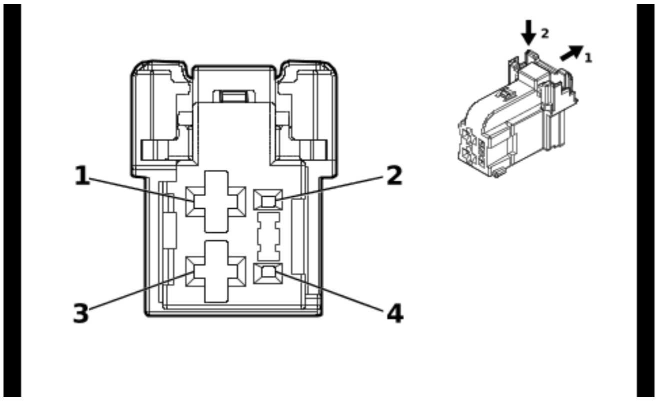
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M55P Seat Rear Vertical Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / WH	289	Passenger Seat Rear Vertical Motor Down Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / WH	288	Passenger Seat Rear Vertical Motor Up Control	I	—
4	—	—	—	Not Occupied	—	—

M56D Seat Recline Motor - Driver (A2X+A45)



5410027

Connector Part Information

Harness Type: Driver Seat

OEM Connector: 2316171-1

Service Connector: Service by Harness - See Part Catalog

Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

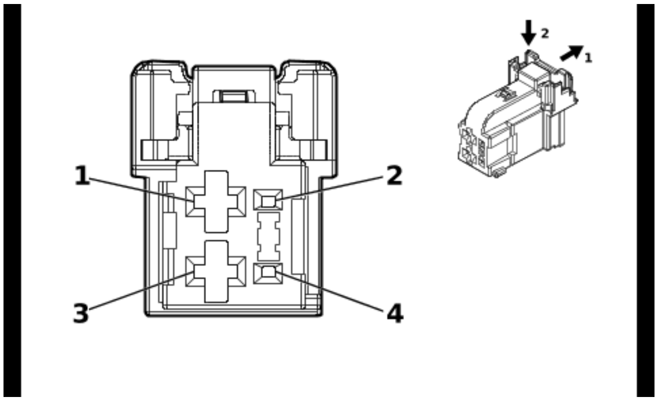
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

M56D Seat Recline Motor - Driver (A2X+A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / YE	276	Driver Seat Recline Motor Forward Control	I	—
2	0.5	WH / RD	3298	Seat Position Sensors High Reference 2	II	—
3	1.5	BU / YE	277	Driver Seat Recline Motor Rearward Control	I	—
4	0.5	WH / BK	570	Driver Seat Recline Motor Position Sensor Signal	II	—

M56D Seat Recline Motor - Driver (A2X-A45)



5410027

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

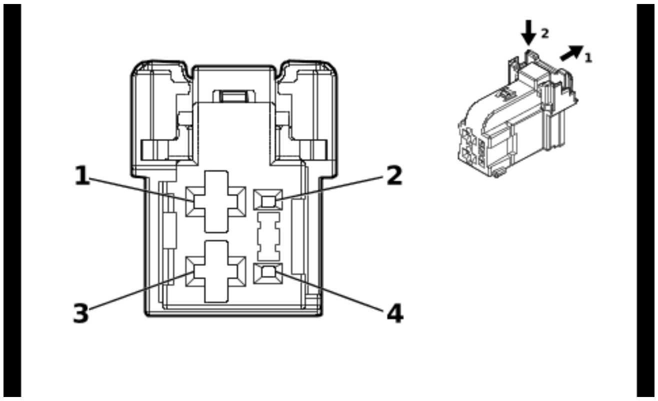
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M56D Seat Recline Motor - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / YE	276	Driver Seat Recline Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	BU / YE	277	Driver Seat Recline Motor Rearward Control	I	—
4	—	—	—	Not Occupied	—	—

M56P Seat Recline Motor - Passenger (A7K)



5410027

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

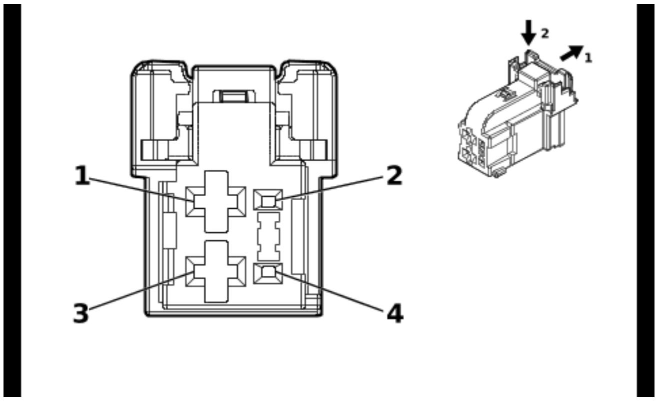
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M56P Seat Recline Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	76	Passenger Seat Recline Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	BU / BN	77	Passenger Seat Recline Motor Rearward Control	I	—
4	—	—	—	Not Occupied	—	—

M56P Seat Recline Motor - Passenger (AK7)



5410027

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64, 2.8 Series(BK)

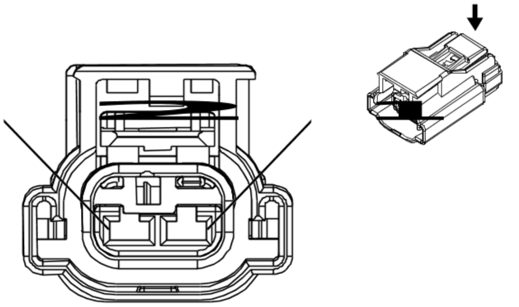
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M56P Seat Recline Motor - Passenger (AK7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	76	Passenger Seat Recline Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	BU / BN	77	Passenger Seat Recline Motor Rearward Control	I	—
4	—	—	—	Not Occupied	—	—

M63 Sliding Rear Window Motor (A48)



2716333

Connector Part Information

Harness Type: Body
OEM Connector: 13863838
Service Connector: 19301518
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

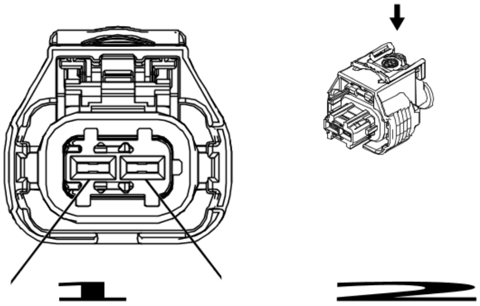
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M63 Sliding Rear Window Motor (A48)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE / BU	5442	Endgate Window Motor Up Signal	I	—
2	2.5	GY / GN	5441	Endgate Window Motor Down Signal	I	—

M64 Starter Motor X1 (L3B)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

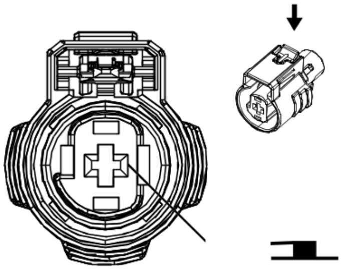
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M64 Starter Motor X1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—
2	2.5	YE / GN	4358	Starter Pinion Solenoid Voltage	I	—

M64 Starter Motor X1 (L82)



2717134

Connector Part Information

Harness Type: Engine
OEM Connector: 2098198-5
Service Connector: 19300471
Description: 1 <p01>-Way F 2.8 MCP Series, Sealed(BK)

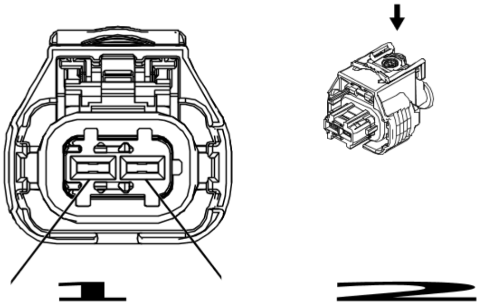
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M64 Starter Motor X1 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—

M64 Starter Motor X1 (L84/L87)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 1928405714
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

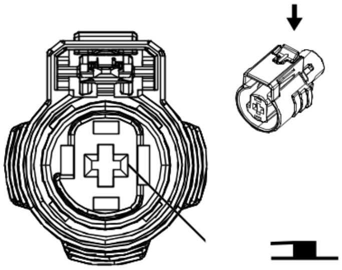
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M64 Starter Motor X1 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—
2	2.5	YE / GN	4358	Starter Pinion Solenoid Voltage	I	—

M64 Starter Motor X1 (LM2)



2717134

Connector Part Information

Harness Type: Engine
OEM Connector: 2098198-5
Service Connector: 19300471
Description: 1 <p01>-Way F 2.8 MCP Series, Sealed(BK)

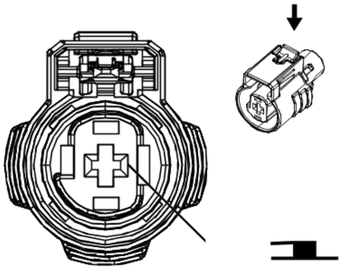
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M64 Starter Motor X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—

M64 Starter Motor X1 (LV3)



2717134

Connector Part Information

Harness Type: Engine
OEM Connector: 2098198-5
Service Connector: 19300471
Description: 1 <p01>-Way F 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M64 Starter Motor X1 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—

M64 Starter Motor X2

—

Connector Part Information

Harness Type: Starter Motor
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way Ring Terminal

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M64 Starter Motor X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	RD / YE	2	Battery Positive Voltage	I	—

M69 Sunroof Motor (CF5)

—

Connector Part Information

Harness Type: Sunroof Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F

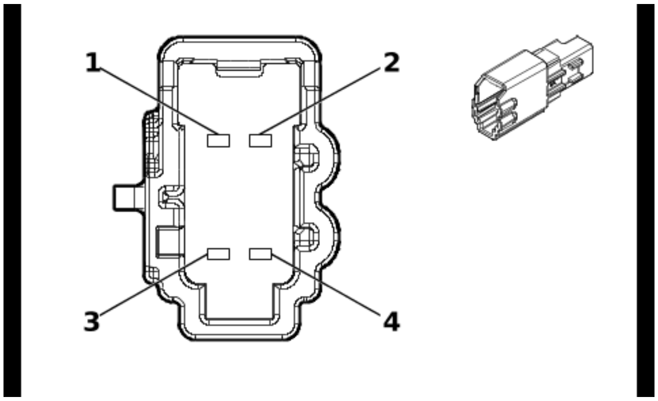
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M69 Sunroof Motor (CF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	RD / GY	3140	Battery Positive Voltage	I	—
2	1.5	BK	1050	Ground	I	—
3	0.35	BK / GY	128	Sunroof Switch Low Reference	I	—
5	0.35	YE / WH	3031	Sunroof Vent Switch Signal	I	—
7	0.35	GN / BN	6132	Body Control Module LIN Bus 1	I	—
8	0.35	BU / VT	5027	Sunroof Switch Serial Data 1 Signal	I	—

M73A Seat Blower Motor - Driver Back (KQV)



5423974

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(GY)

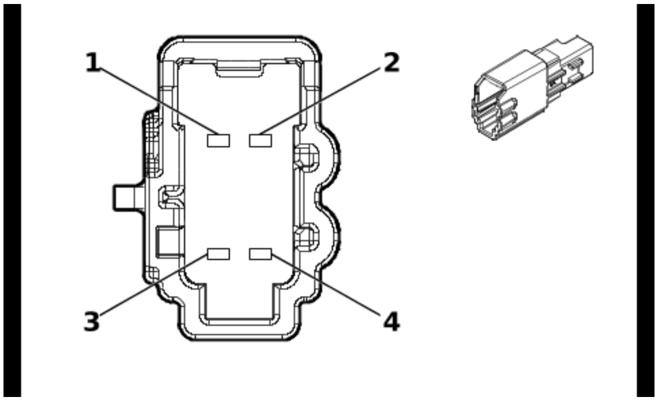
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

M73A Seat Blower Motor - Driver Back (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GN / VT	5906	Driver Seat Blower Motor Control 1	I	—
3	0.75	BK	1150	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73B Seat Blower Motor - Passenger Back (KQV)



5423974

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(GY)

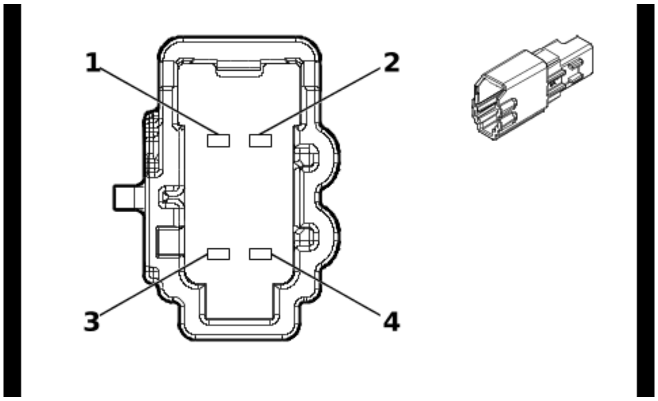
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

M73B Seat Blower Motor - Passenger Back (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	WH	5908	Passenger Seat Blower Motor Control 1	I	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73C Seat Blower Motor - Driver Cushion (KQV)



5423974

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(GY)

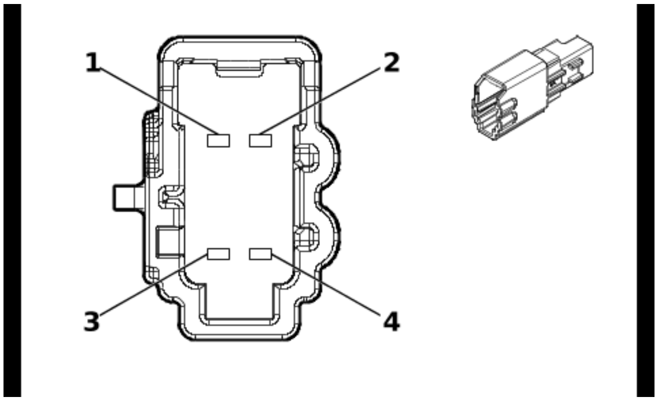
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

M73C Seat Blower Motor - Driver Cushion (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GN / VT	5906	Driver Seat Blower Motor Control 1	I	—
3	0.75	BK	1150	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73D Seat Blower Motor - Passenger Cushion (KQV)



5423974

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.2 MCON Series(GY)

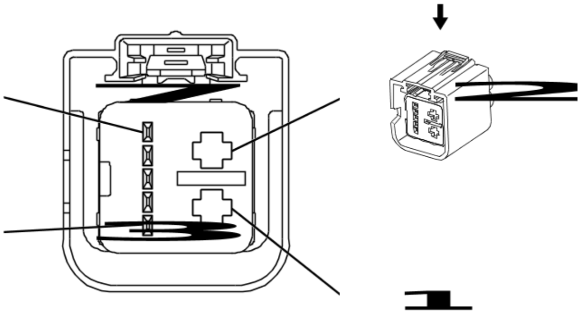
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

M73D Seat Blower Motor - Passenger Cushion (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	WH	5908	Passenger Seat Blower Motor Control 1	I	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—

M74D Window Motor - Driver (AXG)



2282932

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way F 0.64, 2.8 Kaizen Timer Series, Sealed(GY)

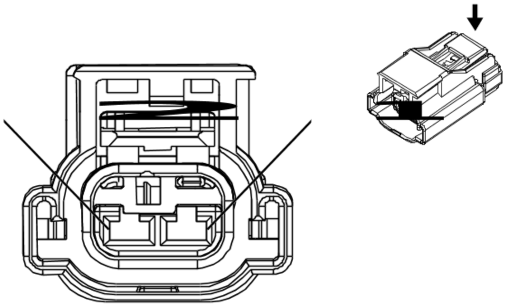
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

M74D Window Motor - Driver (AXG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1150	Ground	I	—
2	2.5	RD / BU	1842	Battery Positive Voltage	I	—
3	0.35	GN / WH	3379	Window Switch Driver Up Signal	II	—
4	0.5	GN / YE	6134	Body Control Module LIN Bus 3	II	—
5	0.35	GN	3381	Window Switch Driver Express Signal	II	—
6	0.5	PK	745	Left Front Door Ajar Switch Signal	II	—
7	0.5	GY	3380	Driver Window Main Control Down Switch Signal	II	—

M74LR Window Motor - Left Rear (AEQ)



2716333

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

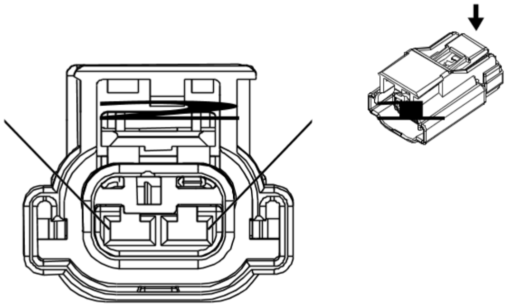
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M74LR Window Motor - Left Rear (AEQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BU / VT	668	Left Rear Window Motor Up Control	I	—
2	2	YE / BU	669	Left Rear Window Motor Down Control	I	—

M74P Window Motor - Passenger (AED)



2716333

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

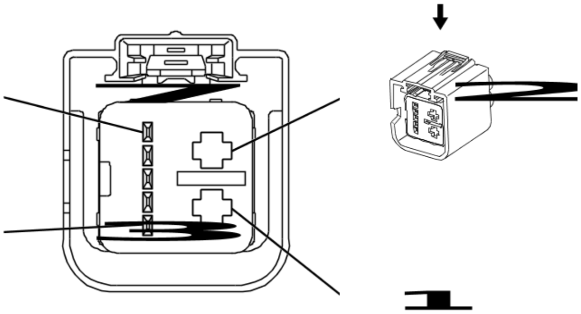
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M74P Window Motor - Passenger (AED)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	GN / GY	3387	Passenger Window Motor Up Control	I	—
2	2	YE / BU	3388	Passenger Window Motor Down Control	I	—

M74P Window Motor - Passenger (AEF)



2282932

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way F 0.64, 2.8 Kaizen Timer Series, Sealed(GY)

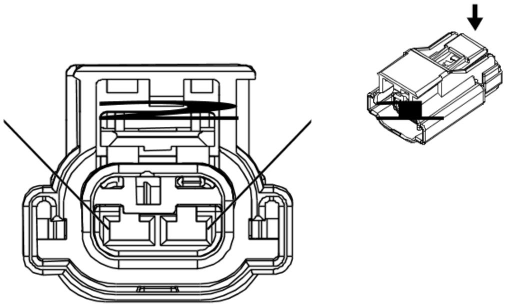
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required

M74P Window Motor - Passenger (AEF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1250	Ground	I	—
2	2.5	RD / WH	1340	Battery Positive Voltage	I	—
3	0.35	YE / BK	3384	Window Switch Passenger Up Signal	II	—
4	0.35	GN / YE	6134	Body Control Module LIN Bus 3	II	—
5	0.35	VT / GY	3386	Window Switch Passenger Express Signal	II	—
6	0.5	GY	746	Right Front Door Ajar Switch Signal	II	—
7	0.5	BN / YE	3385	Window Switch Passenger Down Signal	II	—

M74RR Window Motor - Right Rear (AEQ)



2716333

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

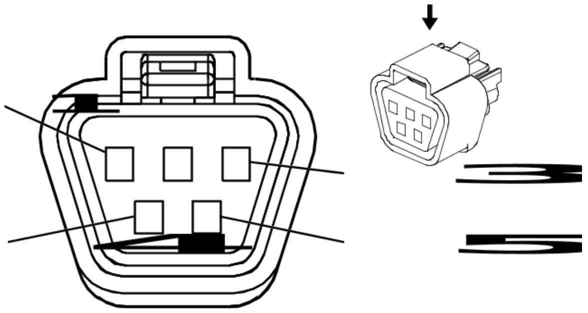
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M74RR Window Motor - Right Rear (AEQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BU / GY	670	Right Rear Window Motor Up Control	I	—
2	2	GN / BK	671	Right Rear Window Motor Down Control	I	—

M75 Windshield Wiper Motor



1715213

Connector Part Information

Harness Type: Body
OEM Connector: 15316488
Service Connector: 13587179
Description: 5 <p01>-Way F 090 Series, Sealed(BK)

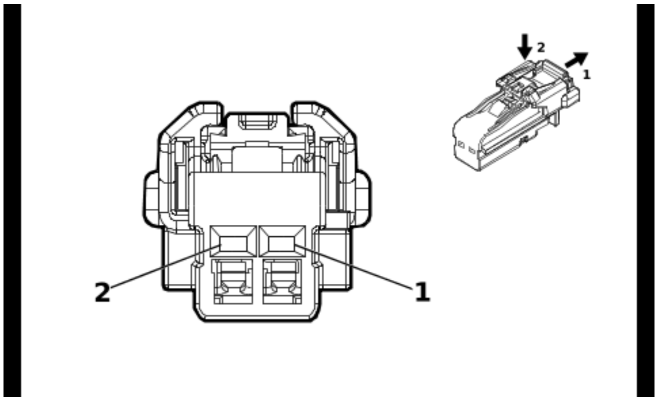
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-18 (BK)	No Tool Required

M75 Windshield Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	YE / BN	95	Windshield Wiper Motor Low Speed Control	II	—
2	—	—	—	Not Occupied	—	—
3	0.35	BN / GN	196	Windshield Wiper Motor Park Switch Signal	I	—
4	2	WH	92	Windshield Wiper Motor High Speed Control	II	—
5	2	BK	150	Ground	II	—

M93 Key Capture Solenoid Actuator (-BTM)



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8988
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M93 Key Capture Solenoid Actuator (-BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / GY	1630	Steering Column Key Cylinder Lock Solenoid Actuator Control	I	—
2	0.35	BK	1850	Ground	I	—

M95L Assist Step - Left (BRS)

—

Connector Part Information

Harness Type: Left Side Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M95L Assist Step - Left (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.0	OG	7471	Left Running Board Step Motor Control Extend	I	—
2	0.5	OG / WH	7468	Left Running Board Step Motor Hall Sensor 5V Reference	I	—
3	2.0	YE	7472	Left Running Board Step Motor Control Retract	I	—
4	0.5	YE / WH	7467	Left Running Board Step Motor Hall Sensor Signal	I	—
7	0.5	BN / WH	7466	Left Running Board Step Motor Hall Sensor Low Reference	I	—

M95R Assist Step - Right (BRS)

—

Connector Part Information

Harness Type: Right Side Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way

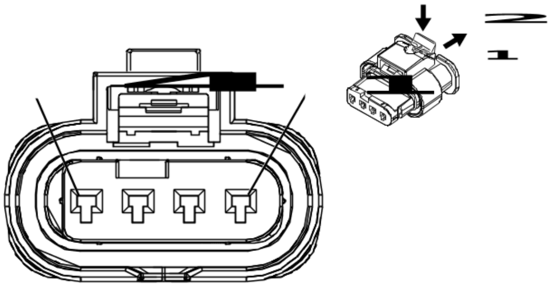
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M95R Assist Step - Right (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.0	OG	7470	Right Running Board Step Motor Control Extend	I	—
2	0.5	OG / WH	7464	Right Running Board Step Motor Hall Sensor 5V Reference	I	—
3	2.0	YE	7469	Right Left Running Board Step Motor Control Retract	I	—
4	0.5	YE / WH	7465	Right Running Board Step Motor Hall Sensor Signal	I	—
7	0.5	BN / WH	7463	Right Running Board Step Motor Hall Sensor Low Reference	I	—

M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)



4256124

Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: 13594673
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2 MCON Series, Sealed(BK)

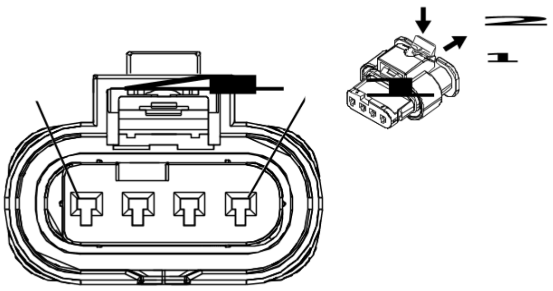
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
2	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	0.5	BK	4450	Ground	I	—
4	—	—	—	Not Occupied	—	—

M96B Active Grille Air Shutter 2 Actuator (WMI)



4256124

Connector Part Information

Harness Type: Active Grille Air Shutter 2 Actuator Jumper
OEM Connector: 13594673
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.2 MCON Series, Sealed(BK)

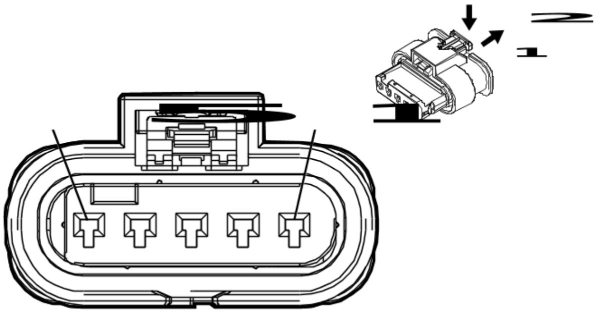
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

M96B Active Grille Air Shutter 2 Actuator (WMI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / BU	5705	Powertrain Main Relay Control	I	—
2	—	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	—	BK	4450	Ground	I	—
4	—	BK	4450	Ground	I	—

M103 Turbocharger Vane Position Actuator (LM2)



3338689

Connector Part Information

Harness Type: Engine
OEM Connector: 1-1718806-1
Service Connector: 19119351
Description: 5 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

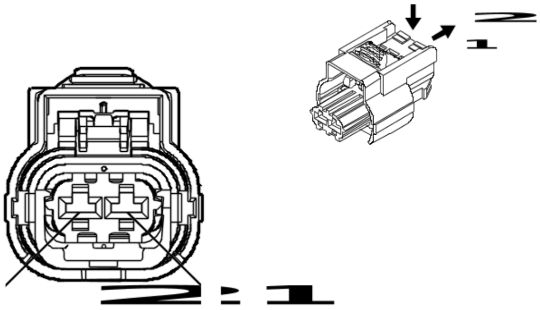
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M103 Turbocharger Vane Position Actuator (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	1313	Variable Geometry Turbocharger Position Sensor Motor Open Control	I	—
2	0.5	VT / YE	5947	Turbocharger Vane Position Sensor Signal	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.75	GY / BK	1330	Variable Geometry Turbocharger Position Sensor Motor Close Control	I	—

M104L Park Brake Actuator - Left



4992524

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 13532979
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 CTS Series, Sealed(BK)

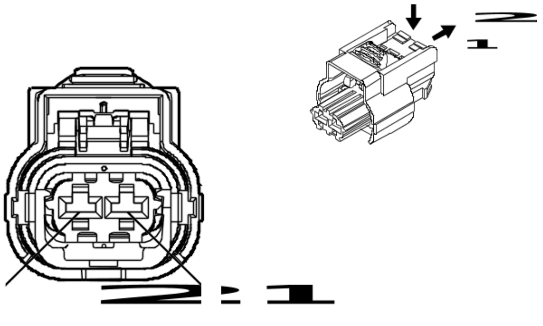
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M104L Park Brake Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	WH	2001	Left Park Brake Motor Apply Control	I	—
2	2.5	GY / BK	4369	Left Park Brake Motor Low Reference	I	—

M104R Park Brake Actuator - Right



4992524

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 13532979
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 CTS Series, Sealed(BK)

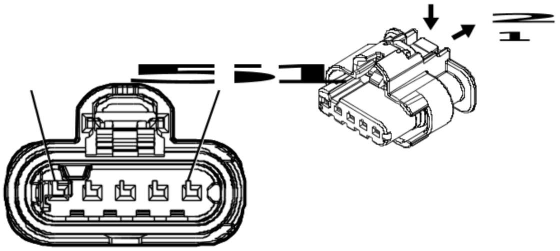
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M104R Park Brake Actuator - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN / VT	1988	Right Park Brake Motor Apply Control	I	—
2	2.5	GY	4368	Right Park Brake Motor Low Reference	I	—

M122 Exhaust Pressure Regulator Valve (LM2)



4997783

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296697-1
Service Connector: 19371195
Description: 5 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

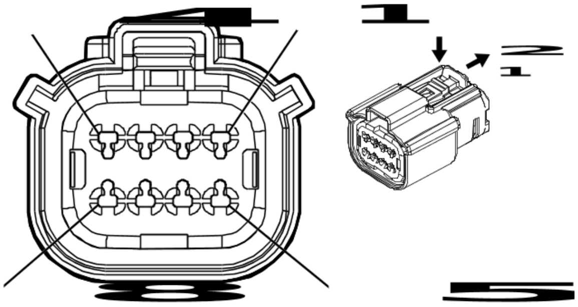
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M122 Exhaust Pressure Regulator Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	I	—
3	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
4	0.75	BN	1421	Exhaust Restrictor Motor Closed Control	I	—
5	0.75	YE / BN	1420	Exhaust Restrictor Motor Open Control	I	—

M125 Pickup Box Endgate Power Assist Actuator (QT6)



4846407

Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

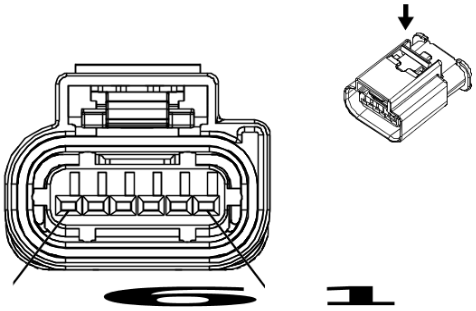
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

M125 Pickup Box Endgate Power Assist Actuator (QT6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BN / WH	4690	Rear Closure Open/Close Motor Close Control	I	—
2	0.5	GN	1577	Rear Closure Clutch Control	I	—
3	0.5	OG / WH	1590	Rear Closure Clutch Low Return	I	—
4	0.5	BN / RD	4683	Rear Closure Position Sensor Voltage Reference	I	—
5	1	WH	4689	Rear Closure Open/Close Motor Open Control	I	—
6	0.35	BN / YE	4686	Rear Closure Position Sensor Signal 2	I	—
7	0.35	BK / GN	4687	Rear Closure Position Sensor Low Reference	I	—
8	0.5	BU / WH	4685	Rear Closure Position Sensor Signal 1	I	—

M128 Turbocharger Wastegate Actuator (L3B)



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6 <p01>-Way F 1.2 MCON Series, Sealed(BK)

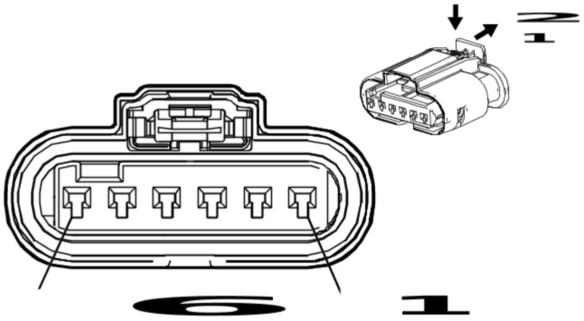
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M128 Turbocharger Wastegate Actuator (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	WH	2590	Turbocharger Wastegate Motor Feedback Signal	I	—
3	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
4	0.75	WH / BU	2592	Turbocharger Wastegate Motor Close Control	I	—
5	0.75	WH / BN	2591	Turbocharger Wastegate Motor Open Control	I	—
6	—	—	—	Not Occupied	—	—

M129A Intake Camshaft Profile Actuator 1 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

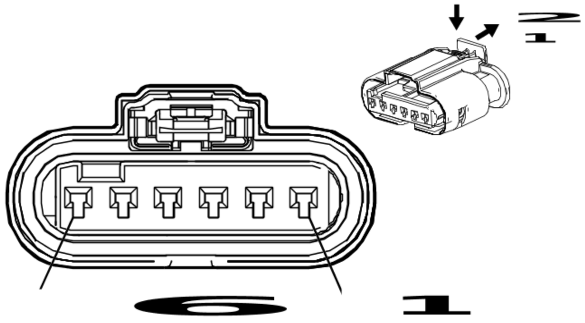
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M129A Intake Camshaft Profile Actuator 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / GY	3615	Step Cam A Control	I	—
2	0.5	BU / WH	3589	Camshaft Position Motor Position Sensor 1 Signal	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	GN / BK	3616	Step Cam B Control	I	—

M129B Intake Camshaft Profile Actuator 2 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

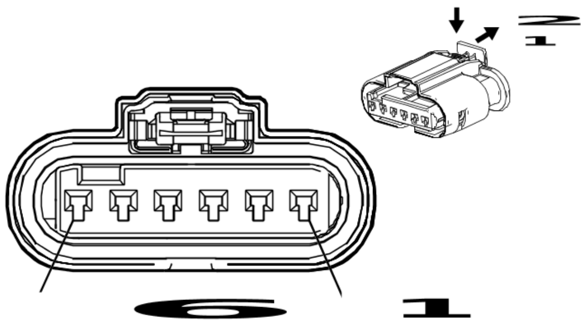
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M129B Intake Camshaft Profile Actuator 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3584	Camshaft Position Motor Control A	I	—
2	0.5	GN / WH	3592	Camshaft Position Motor Position Sensor 2 Signal	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	GN	3585	Camshaft Position Motor Control B	I	—

M129C Intake Camshaft Profile Actuator 3 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

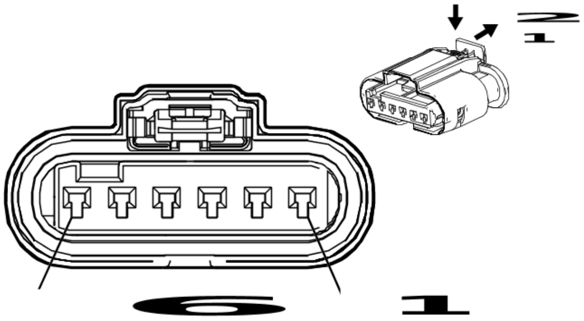
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M129C Intake Camshaft Profile Actuator 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	3587	Camshaft Position Motor Control D	I	—
2	0.5	WH	924	—	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	GY	3586	Camshaft Position Motor Control C	I	—

M129D Intake Camshaft Profile Actuator 4 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

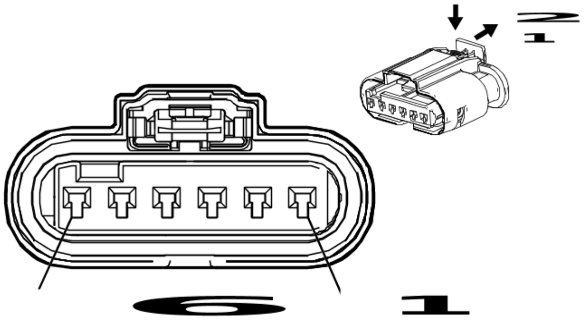
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M129D Intake Camshaft Profile Actuator 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	927	—	I	—
2	0.5	BU / BK	928	—	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	BU	926	—	I	—

M130B Exhaust Camshaft Profile Actuator 2 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

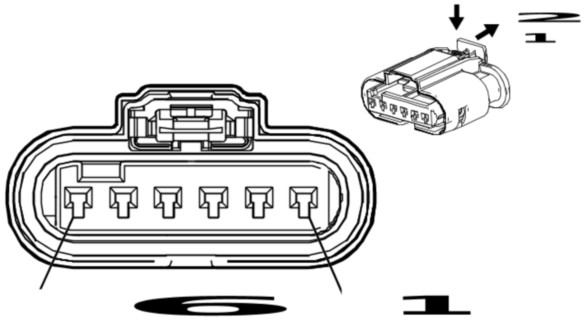
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M130B Exhaust Camshaft Profile Actuator 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	6265	Camshaft Exhaust Stepper Cylinder 2 Rear Solenoid Control	I	—
2	0.5	BU	932	—	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	VT / BK	6264	Camshaft Exhaust Stepper Cylinder 2 Front Solenoid Control	I	—

M130C Exhaust Camshaft Profile Actuator 3 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

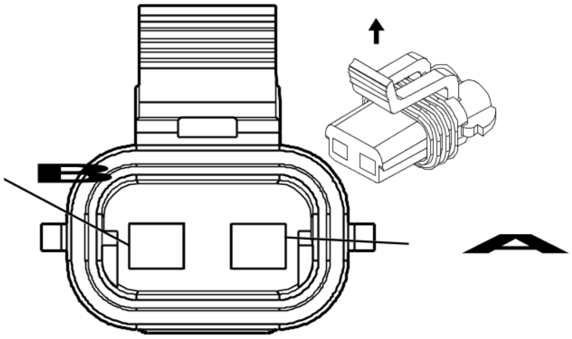
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

M130C Exhaust Camshaft Profile Actuator 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BN	6262	Camshaft Exhaust Stepper Cylinder 3 Rear Solenoid Control	I	—
2	0.5	GY / BN	933	—	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	GN / BN	6261	Camshaft Exhaust Stepper Cylinder 3 Front Solenoid Control	I	—

P3 Backup Alarm (8S3-U1D)



68721

Connector Part Information

Harness Type: Back Up Alarm
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 280 Metri-Pack Series, Sealed(BK)

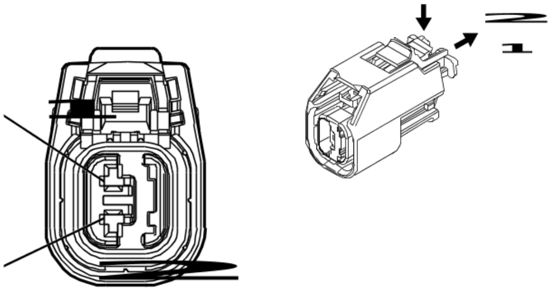
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

P3 Backup Alarm (8S3-U1D)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	GN	1624	Trailer Backup Lamp Control	I	—
B	1	WH	22	Trailer Ground	I	—

P12 Horn



4889830

Connector Part Information

Harness Type: Body
OEM Connector: 33164011
Service Connector: 19371210
Description: 2 <p01>-Way F 1.5 OCS Series, Sealed(BK)

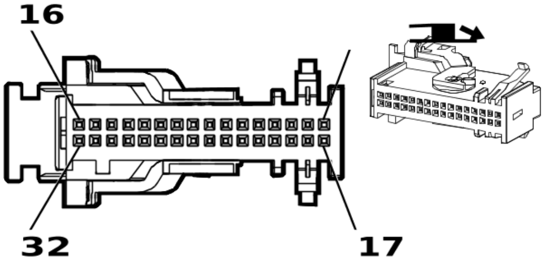
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

P12 Horn

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	I	—
2	0.75	BN / GY	29	Horn Control	I	—

P16 Instrument Cluster X1



4806665

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13594078
Service Connector: 13511333
Description: 32 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (LT BU)	J-38125-12A

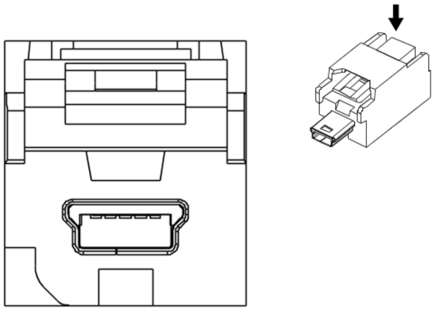
P16 Instrument Cluster X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / BU	7216	Ethernet Bus 7 [-]	I	IOS/ IOT
2	—	—	—	Not Occupied	—	—
3	0.35	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.35	RD / GY	2840	Battery Positive Voltage	I	—
8	0.35	VT / BK	1639	Run/Crank Ignition 1 Voltage	I	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	GY / BK	4787	Day Night LED Control	I	UEU- UV6
12	0.35	GY / YE	3885	Forward Collision Alert LED Control	I	UEU- UV6
13	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	UDD
14	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	UDD
15	—	—	—	Not Occupied	—	—
16	0.35	BN / WH	419	Check Engine Indicator Control	I	—
17	0.35	GY / BU	7217	Ethernet Bus 7 [+]	I	IOS/ IOT
18	—	—	—	Not Occupied	—	—
19	0.5	BK / WH	1851	Signal Ground	I	—
20	0.35	GN / BK	3894	Instrument Cluster LIN Bus 1	I	UK3
21 - 22	—	—	—	Not Occupied	—	—
23	0.35	WH / BU	5986	Serial Data Communication Enable	I	UDD
24	0.35	VT	185	Low Washer Fluid Indicator Control	I	—
25 - 28	—	—	—	Not Occupied	—	—
29	0.35	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	UDD

P16 Instrument Cluster X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.35	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	UDD
31	—	—	—	Not Occupied	—	—
32	0.35	GN / BN	507	Wait To Start Indicator Control	I	LM2

P16 Instrument Cluster X2 (UV6)



3214018

Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 13585112
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(GY)

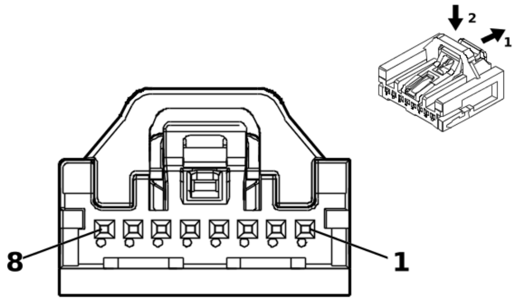
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

P16 Instrument Cluster X2 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	(Head Up Display) Head Up Display Signal	I	—

P17 Info Display Module X1 (UIJ/UIK)



5200269

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35068228
Service Connector: 84769201
Description: 8 <p01>-Way F Mini 50 Series(BK)

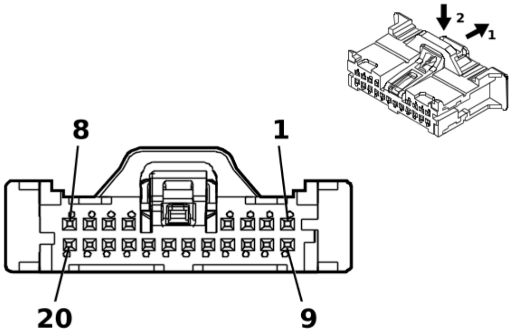
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

P17 Info Display Module X1 (UIJ/UIK)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / WH	1340	Battery Positive Voltage	I	—
2 - 7	—	—	—	Not Occupied	—	—
8	0.35	BK / WH	2751	Signal Ground	I	—

P17 Info Display Module X1 (UIR)



5200955

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35068196
Service Connector: 84769280
Description: 20 <p01>-Way F Mini 50 Series(BK)

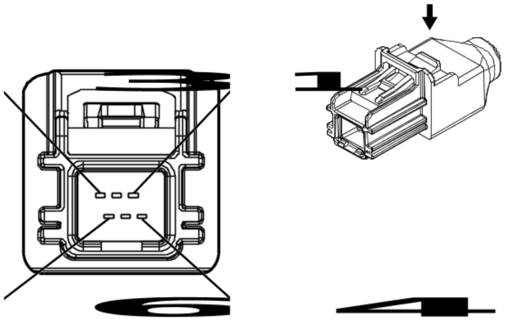
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84944580	EL-35616-58 (BK)	EL-38125-58

P17 Info Display Module X1 (UIR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / RD	2807	Radio Keypad Voltage Reference	I	—
2	0.35	GY / BU	2803	Radio Display Touch Interrupt Request Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BU	4315	Radio Volume Up Switch Signal	I	—
5	0.35	GY / BN	4314	Radio Volume Down Switch Signal	I	—
6	0.35	BN / WH	2809	Radio Keypad Power Signal	I	—
7	0.35	VT / WH	2810	Radio Keypad Button Signal	I	—
8	0.35	BU / GY	2808	Radio Keypad Dimming Control	I	—
9	0.35	BU / GN	2813	Radio Display Backlight Dimming Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	BK / GN	2804	Radio Display Backlight Low Reference	I	—
12	0.35	BU / RD	2807	Radio Keypad Voltage Reference	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	BU	4315	Radio Volume Up Switch Signal	I	—
15	0.35	GY / BN	4314	Radio Volume Down Switch Signal	I	—
16	0.35	BN / WH	2809	Radio Keypad Power Signal	I	—
17	0.35	VT / WH	2810	Radio Keypad Button Signal	I	—
18	0.35	BU / GY	2808	Radio Keypad Dimming Control	I	—
19	0.35	GY / VT	3363	Navigation Display Dimming Control	I	—
20	0.35	BK / YE	2806	Radio Keypad Low Reference	I	—

P17 Info Display Module X2 (UIJ/UIK)



4806625

Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 13522802
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6 <p01>-Way M HSAL-2 Series(BK)

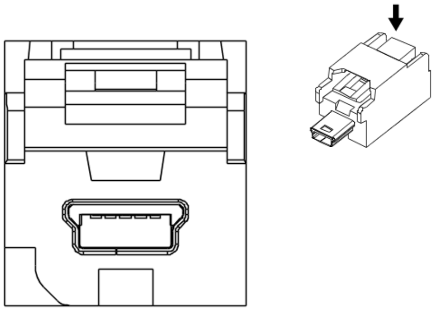
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

P17 Info Display Module X2 (UIJ/UIK)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Navigation Display Signal	I	—

P17 Info Display Module X2 (UIR)



Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 13584751
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(GY)

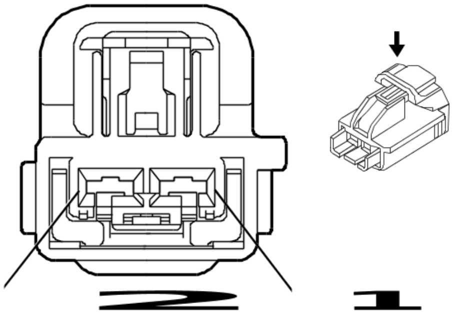
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

P17 Info Display Module X2 (UIR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

P19AC Speaker - Subwoofer (UQA)



1803142

Connector Part Information

Harness Type: Body
OEM Connector: 10846819
Service Connector: 19367562
Description: 2 <p01>-Way F YESC Kaizen Series(L-GY)

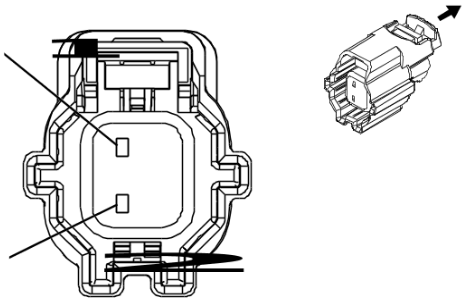
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

P19AC Speaker - Subwoofer (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN / BK	1794	Left/Rear Subwoofer [-] Control	I	—
2	2.5	BU / GY	346	Left/Rear Subwoofer [+] Control	I	—

P19AG Speaker - Left Front Door



4223204

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

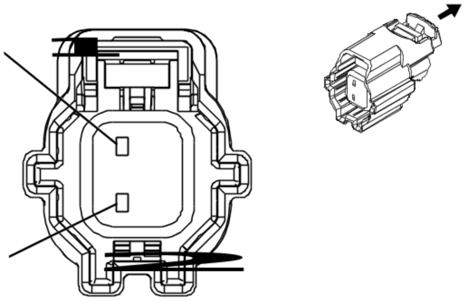
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

P19AG Speaker - Left Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	118	Left Front Speaker [-] Control 1	I	—
2	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—

P19AH Speaker - Right Front Door (U95/UQF/UQA)



4223204

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

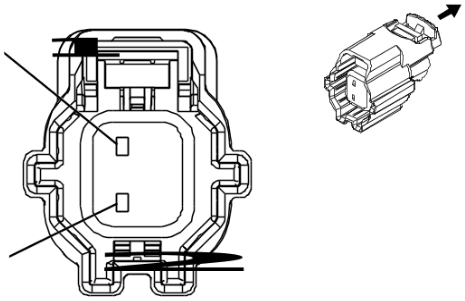
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

P19AH Speaker - Right Front Door (U95/UQF/UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / BK	117	Right Front Speaker [-] Control 1	I	—
2	0.75	YE	200	Right Front Speaker 1 [+] Control	I	—

P19AL Speaker - Left Rear Door (UQA/UQF)



4223204

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

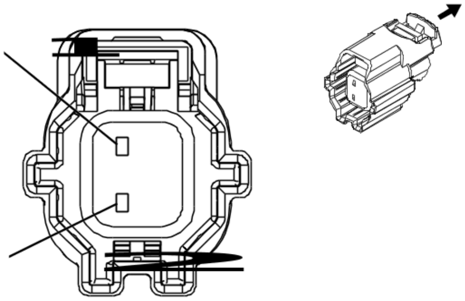
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AL Speaker - Left Rear Door (UQA/UQF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	116	Left Rear Speaker [-] Control	I	—
2	0.5	GN	199	Left Rear Speaker [+] Control	I	—

P19AM Speaker - Right Rear Door (UQF/UQA)



4223204

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 MX Series, Sealed(BK)

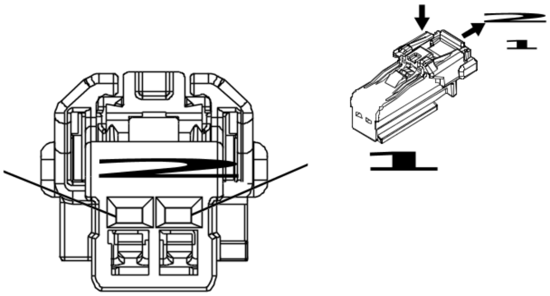
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AM Speaker - Right Rear Door (UQF/UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / BK	115	Right Rear Speaker [-] Control	I	—
2	0.5	WH	46	Right Rear Speaker [+] Control	I	—

P19J Speaker - Left Instrument Panel (UQA)



4373379

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8989
Service Connector: 19369632
Description: 2 <p01>-Way F 1.2 MCON Series(GY)

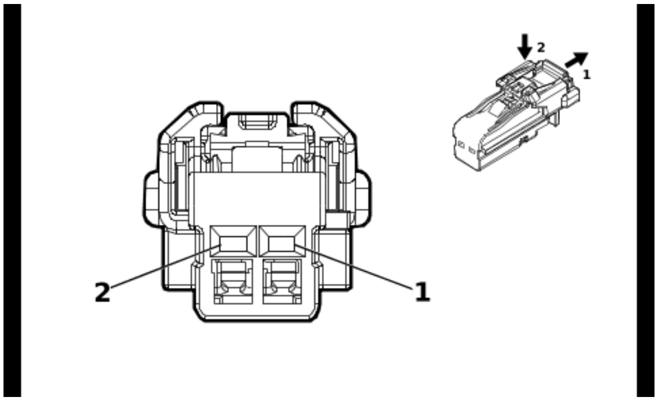
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

P19J Speaker - Left Instrument Panel (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / BN	1957	Left Front Midrange Speaker [-] Control	I	—
2	0.75	BU / VT	1857	Left Front Midrange Speaker [+] Control	I	—

P19J Speaker - Left Instrument Panel (UQF/U95)



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8988
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

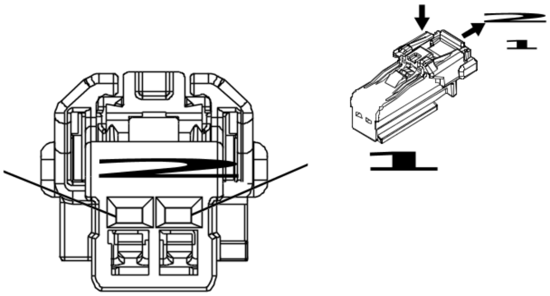
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

P19J Speaker - Left Instrument Panel (UQF/U95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	118	Left Front Speaker [-] Control 1	I	—
2	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—

P19W Speaker - Right Instrument Panel (UQA)



4373379

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8989
Service Connector: 19369632
Description: 2 <p01>-Way F 1.2 MCON Series(GY)

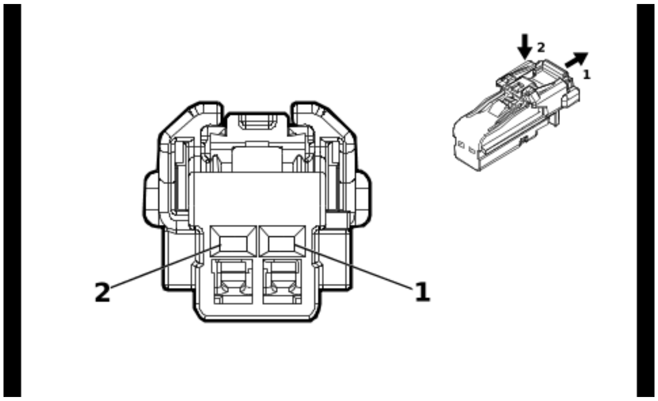
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

P19W Speaker - Right Instrument Panel (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BK	1953	Right Front Midrange Speaker [-] Control	I	—
2	0.75	WH / YE	1853	Right Front Midrange Speaker [+] Control	I	—

P19W Speaker - Right Instrument Panel (UQF/U95)



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8988
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

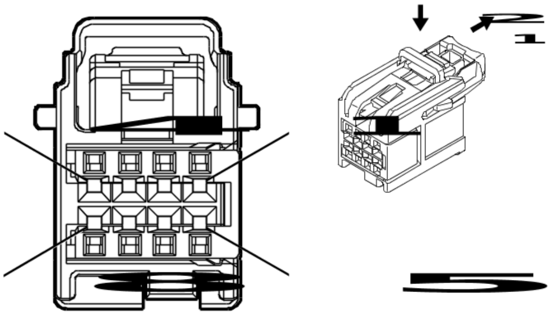
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

P19W Speaker - Right Instrument Panel (UQF/U95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / BK	117	Right Front Speaker [-] Control 1	I	—
2	0.75	YE	200	Right Front Speaker 1 [+] Control	I	—

P29 Head-Up Display X1 (UV6)



4935776

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526972
Service Connector: 19370429
Description: 8 <p01>-Way F 0.64 OCS Series(BK)

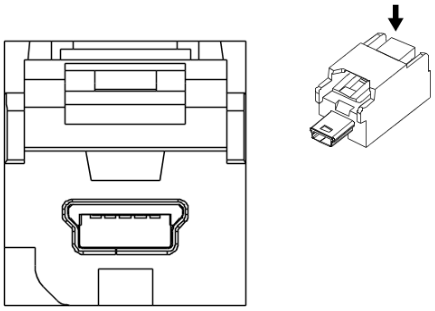
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

P29 Head-Up Display X1 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / BK	3894	Instrument Cluster LIN Bus 1	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	YE / WH	622	Head-Up Display Switch Signal	I	—
4	0.35	BK / WH	1851	Signal Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	RD / WH	1340	Battery Positive Voltage	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BK / GN	5699	Head-Up Display Switch Low Reference	I	—

P29 Head-Up Display X2 (UV6)



3214018

Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 13584751
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(GY)

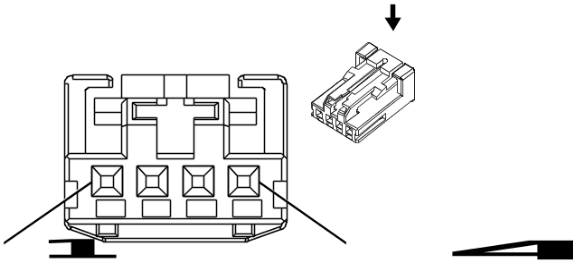
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

P29 Head-Up Display X2 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

P43 Collision Alert Indicators ((UEU/UHX)-UV6)



2717162

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 1-936119-1
Service Connector: 19367524
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

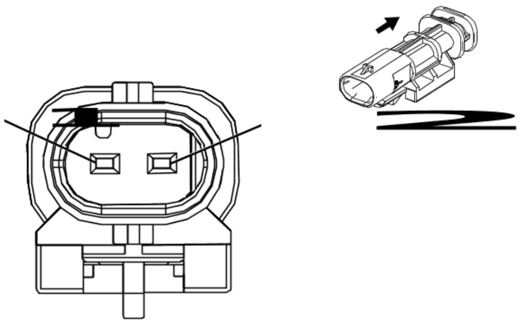
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

P43 Collision Alert Indicators ((UEU/UHX)-UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / BK	1639	Run/Crank Ignition 1 Voltage	I	—
2	0.35	GY / YE	3885	Forward Collision Alert LED Control	I	—
3	0.35	GY / BK	4787	Day Night LED Control	I	—
4	0.5	BK / WH	1851	Signal Ground	I	—

P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)



2474755

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 Multilock Series, Sealed(BK)

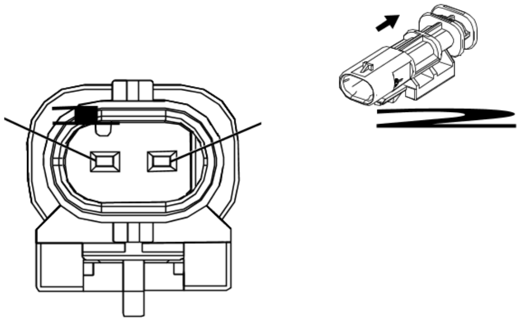
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.5	YE / BN	3037	Driver Seat Left Rear Haptic Movement Motor Control	I	—

P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)



2474755

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 Multilock Series, Sealed(BK)

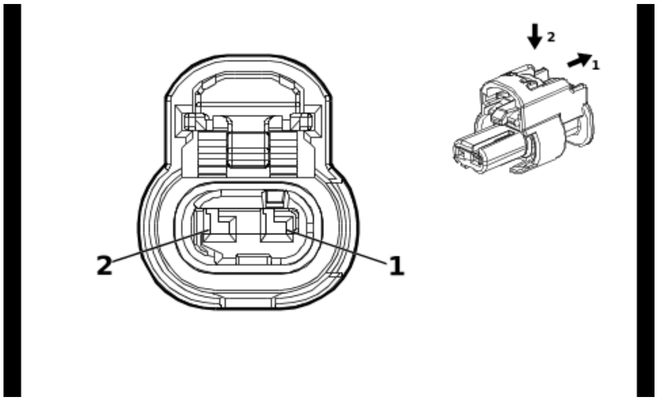
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.5	BN	3038	Driver Seat Right Rear Haptic Movement Motor Control	I	—

Q2 A/C Compressor Clutch



4649903

Connector Part Information

Harness Type: Engine
OEM Connector: 33327048
Service Connector: 19366858
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

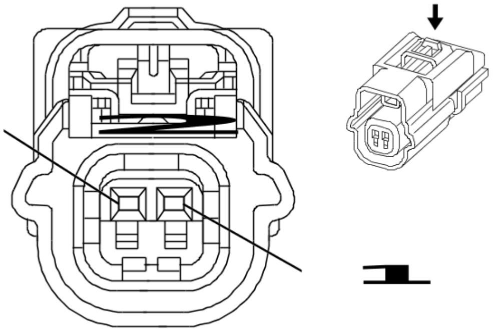
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q2 A/C Compressor Clutch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4450	Ground	I	—
2	0.5	BN / GN	59	A/C Compressor Clutch Control	I	—

Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87/LV3)



1664592

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13528494
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 Kaizen Series, Sealed(BK)

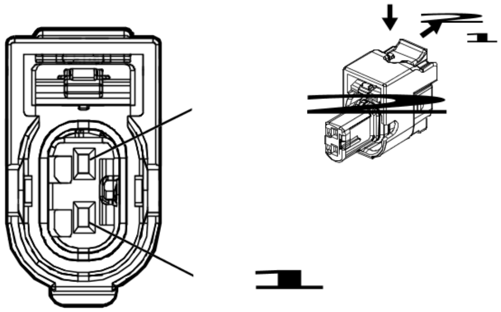
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—
2	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—

Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)



4994585

Connector Part Information

Harness Type: Engine
OEM Connector: 33386202
Service Connector: 19371204
Description: 2 <p01>-Way F 1.2 MCP Series, Sealed(BK)

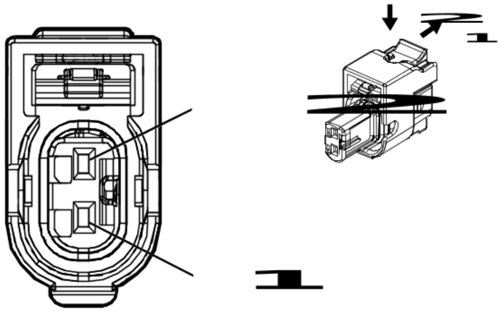
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	5282	Exhaust Camshaft Position Actuator Solenoid Valve 1	I	—
2	0.5	BK / VT	6754	Camshaft Position Actuator Solenoid Valve X Low Reference	I	—

Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)



4994585

Connector Part Information

Harness Type: Engine
OEM Connector: 33386202
Service Connector: 19371204
Description: 2 <p01>-Way F 1.2 MCP Series, Sealed(BK)

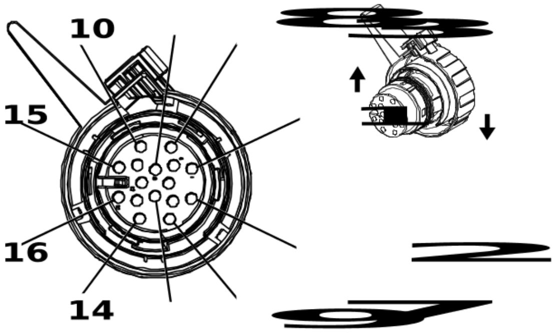
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—
2	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—

Q8 Control Solenoid Valve Assembly X1 (MYC)



3277917

Connector Part Information

Harness Type: Engine
OEM Connector: 09 4307 34
Service Connector: 19303772
Description: 16 <p01>-Way F 1.5 LKS Series, Sealed(BK)

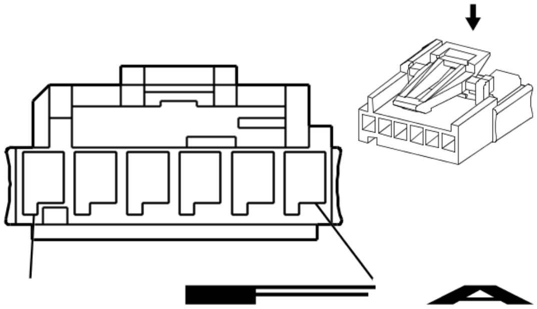
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575434	J-35616-66 (YE)	J-38125-28

Q8 Control Solenoid Valve Assembly X1 (MYC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / GN	1840	Battery Positive Voltage	I	—
2	1	BK / WH	451	Signal Ground	I	—
3	0.5	WH / GY	1786	Transmission Park/Neutral Signal 1	I	—
4	0.75	RD / GN	1840	Battery Positive Voltage	I	—
5	1	BK / WH	451	Signal Ground	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	I	—
10	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
11	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
12	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
13	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
14	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
15	—	—	—	Not Occupied	—	—
16	0.5	BN / WH	6354	Replicated Transmission Output Speed 128K Signal	I	—

Q8 Control Solenoid Valve Assembly X2 (MYC)



347262

Connector Part Information

Harness Type: Transmission
OEM Connector: 15336500
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 150.2 Metri-Pack Series(L-GN)

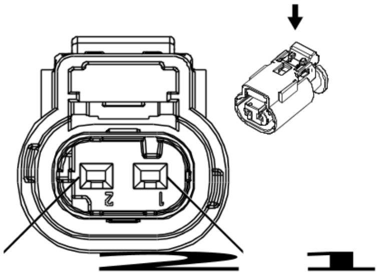
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q8 Control Solenoid Valve Assembly X2 (MYC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GY	50	Ground	I	—
B	0.35	BK	776	Transmission Position Switch Parity Bit Signal	I	—
C	0.35	YE	773	Transmission Position Switch Bit 3 Signal	I	—
D	0.35	RD	772	Transmission Position Switch Bit 2 Signal	I	—
E	0.35	GN	771	Transmission Position Switch Bit 1 Signal	I	—
F	0.35	WH	1786	Transmission Park/Neutral Signal 1	I	—

Q12 Evaporative Emission Purge Solenoid Valve (L3B/L82/L84/L87/LV3)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

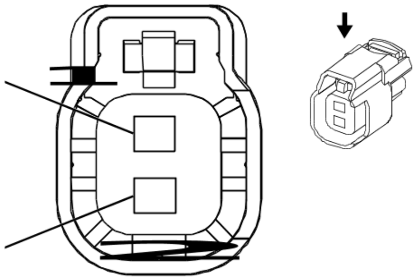
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q12 Evaporative Emission Purge Solenoid Valve (L3B/L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	0.75	GN / BU	428	EVAP Canister Purge Solenoid Control	I	L3B
	0.5	GN / BU	428	EVAP Canister Purge Solenoid Control	I	- L3B

Q13 Evaporative Emission Vent Solenoid Valve (LM2)



2422378

Connector Part Information

Harness Type: Chassis
OEM Connector: 34062-0028
Service Connector: 13579002
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

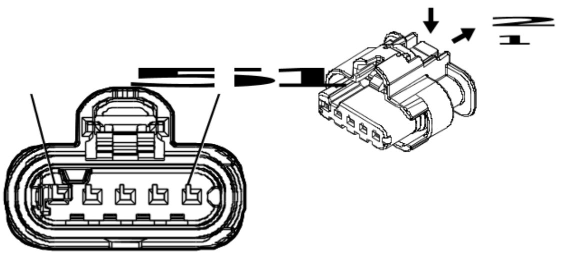
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

Q13 Evaporative Emission Vent Solenoid Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1310	EVAP Vent Solenoid Valve Control	I	—
2	0.5	RD / WH	2040	Battery Positive Voltage	I	—

Q14A Exhaust Gas Recirculation Valve 1 (LM2)



4997783

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296697-1
Service Connector: 19371195
Description: 5 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

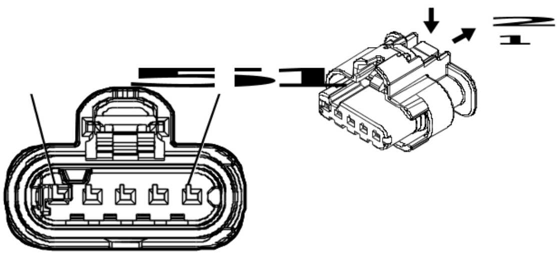
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q14A Exhaust Gas Recirculation Valve 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	BN / WH	5763	Exhaust Gas Recirculation Position Signal	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.75	WH / VT	5764	Exhaust Gas Recirculation Valve High Control	I	—
5	0.75	VT / BK	5746	Exhaust Gas Recirculation Valve Low Control	I	—

Q14B Exhaust Gas Recirculation Valve 2 (LM2)



4997783

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296697-1
Service Connector: 19371195
Description: 5 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

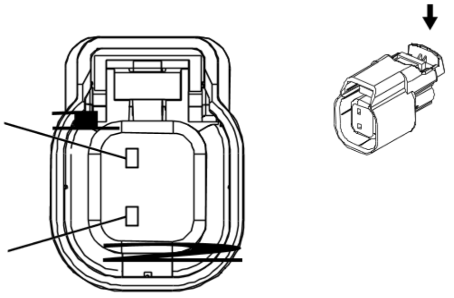
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q14B Exhaust Gas Recirculation Valve 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	0.5	BU / GN	4012	Exhaust Gas Recirculation 2 Valve Position Sensor Signal	I	—
3	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
4	0.75	BU / WH	4014	Exhaust Gas Recirculation 2 Valve Open Control	I	—
5	0.75	BU / BN	4013	Exhaust Gas Recirculation 2 Valve Close Control	I	—

Q17A Fuel Injector 1 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

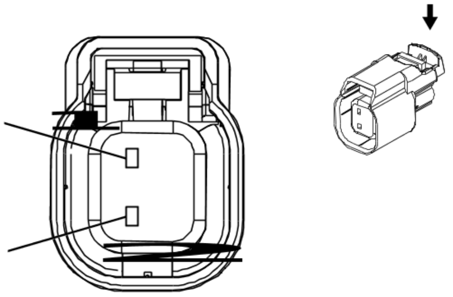
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17A Fuel Injector 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—
2	0.8	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—

Q17A Fuel Injector 1 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

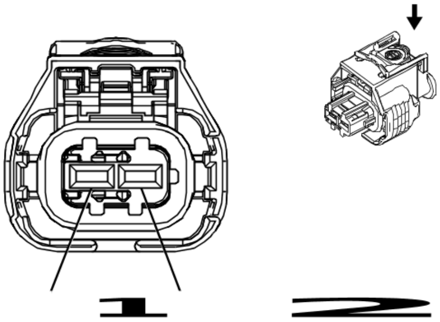
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17A Fuel Injector 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—
2	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—

Q17A Fuel Injector 1 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

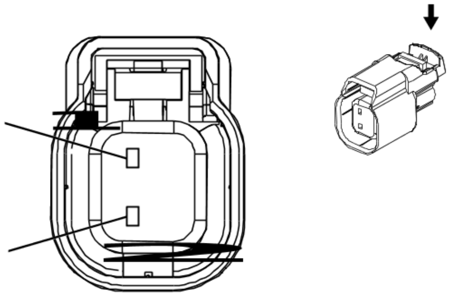
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17A Fuel Injector 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—
2	1.5	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—

Q17B Fuel Injector 2 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

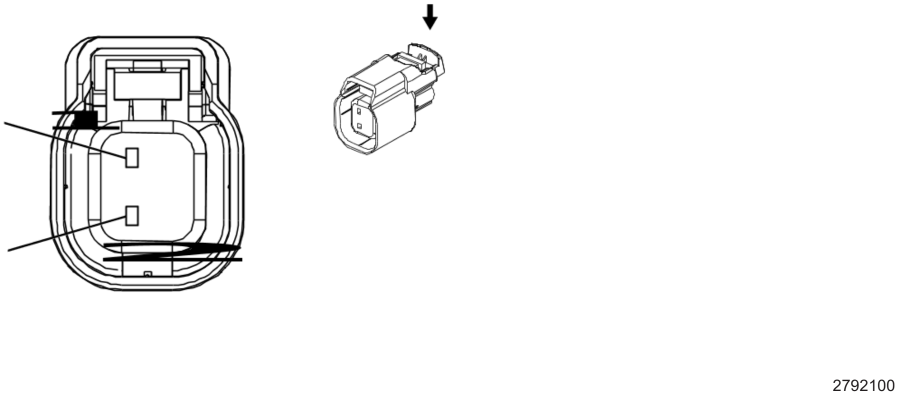
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17B Fuel Injector 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—
2	0.8	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—

Q17B Fuel Injector 2 (L82/L84/L87/LV3)



Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

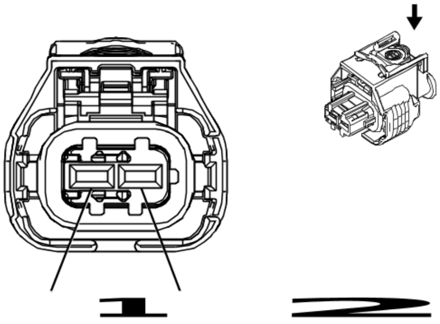
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17B Fuel Injector 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—
2	—	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—

Q17B Fuel Injector 2 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

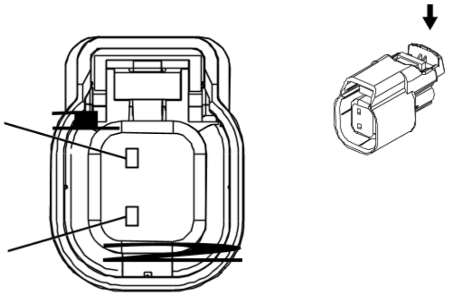
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17B Fuel Injector 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—
2	1.5	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—

Q17C Fuel Injector 3 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

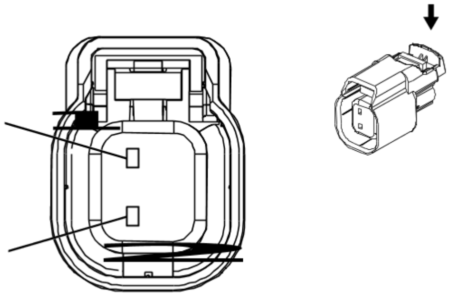
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17C Fuel Injector 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—
2	0.8	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—

Q17C Fuel Injector 3 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

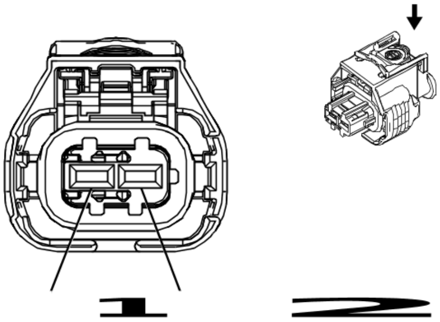
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17C Fuel Injector 3 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—
2	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—

Q17C Fuel Injector 3 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

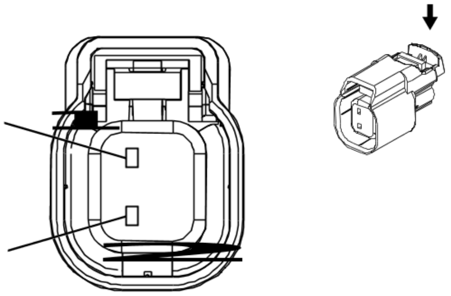
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17C Fuel Injector 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—
2	1.5	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—

Q17D Fuel Injector 4 (L3B)



Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

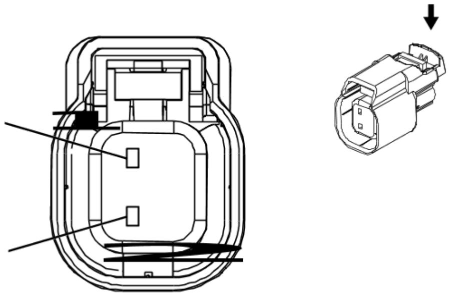
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17D Fuel Injector 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—
2	0.8	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—

Q17D Fuel Injector 4 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

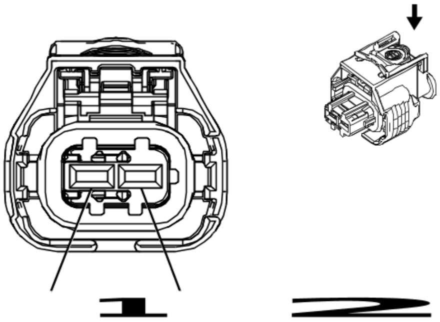
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17D Fuel Injector 4 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—
2	—	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—

Q17D Fuel Injector 4 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

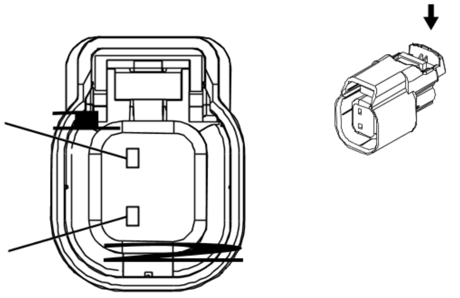
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17D Fuel Injector 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—
2	1.5	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—

Q17E Fuel Injector 5 (L82/L84/L87/LV3)


2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

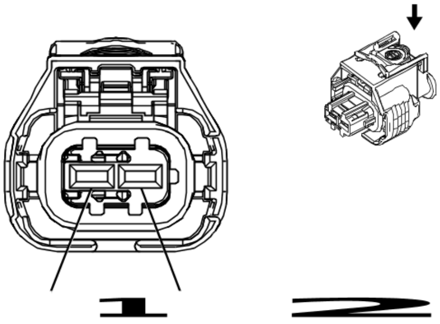
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17E Fuel Injector 5 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
2	—	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—

Q17E Fuel Injector 5 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

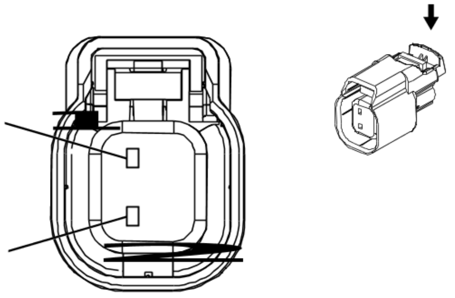
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17E Fuel Injector 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
2	1.5	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—

Q17F Fuel Injector 6 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

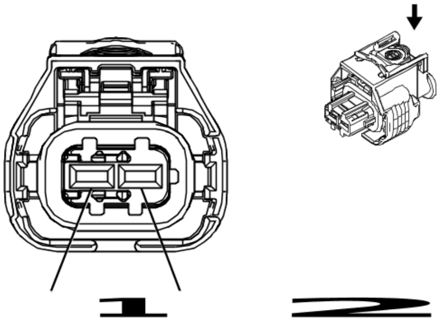
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17F Fuel Injector 6 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	I	—
2	—	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	I	—

Q17F Fuel Injector 6 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

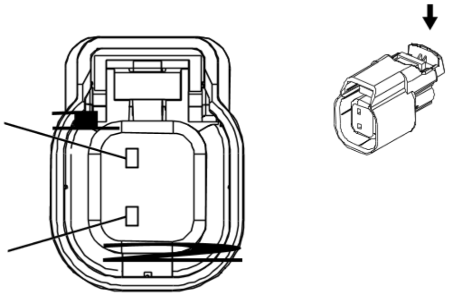
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17F Fuel Injector 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	I	—
2	1.5	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	I	—

Q17G Fuel Injector 7 (L82/L84/L87)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

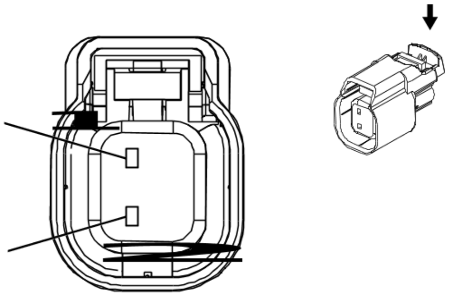
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17G Fuel Injector 7 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	I	—
2	—	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	I	—

Q17H Fuel Injector 8 (L82/L84/L87)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.5 Series, Sealed(BK)

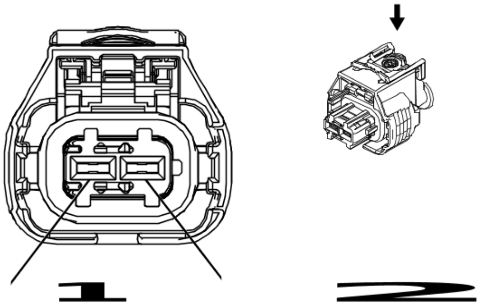
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

Q17H Fuel Injector 8 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / WH	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	I	—
2	—	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	I	—

Q18A Fuel Pressure Regulator 1 (LM2)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 1928405714
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

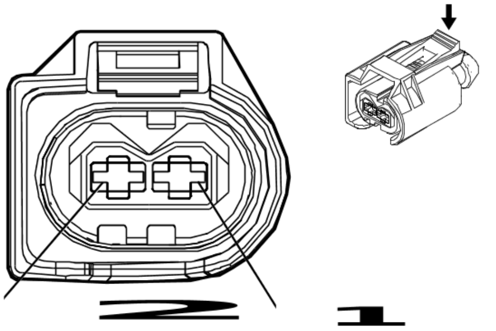
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q18A Fuel Pressure Regulator 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE / VT	2420	Fuel High Pressure Pump Low Enable Signal	I	—
2	1	GY / BN	2419	Fuel High Pressure Pump High Side Supply Voltage	I	—

Q18B Fuel Pressure Regulator 2 (LM2)



5095463

Connector Part Information

Harness Type: Engine
OEM Connector: 33163309
Service Connector: 84616656
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

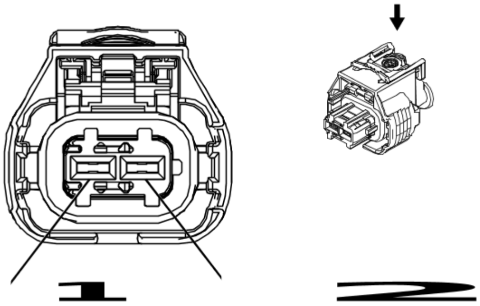
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

Q18B Fuel Pressure Regulator 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK / YE	2834	Fuel Rail Pressure Solenoid Valve Low Reference	I	—
2	0.75	BU / WH	2530	Fuel Rail Pressure Solenoid Valve Control	I	—

Q18C Fuel Pressure Regulator 3 (LM2)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 1928405714
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

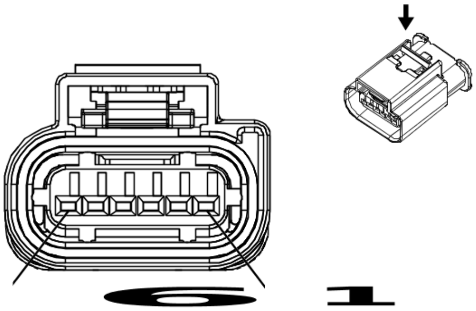
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q18C Fuel Pressure Regulator 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / VT	7245	High Pressure Fuel Pump Low Enable Signal	I	—
2	0.75	GY / BN	7244	High Pressure Fuel Pump High Side Control	I	—

Q20 Intake Air Flow Valve (LM2)



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6 <p01>-Way F 1.2 MCON Series, Sealed(BK)

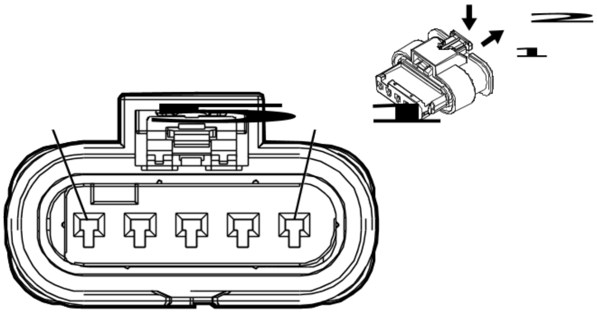
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q20 Intake Air Flow Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	581	Throttle Actuator Open Control	I	—
2	0.75	BN / WH	582	Throttle Actuator Close Control	I	—
3	0.75	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
4	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
5	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
6	—	—	—	Not Occupied	—	—

Q22 Intake Manifold Tuning Solenoid Valve (LM2)



3338689

Connector Part Information

Harness Type: Engine
OEM Connector: 1-1718806-1
Service Connector: 19119351
Description: 5 <p01>-Way F 1.2 MCON-LL Series, Sealed(BK)

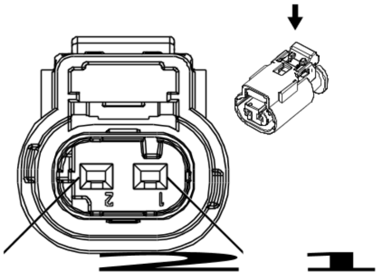
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q22 Intake Manifold Tuning Solenoid Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
2	0.5	GN / GY	7316	Intake Manifold Runner Valve Actuator Control	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.75	BK / BU	1408	Variable Swirl Valve Close Control	I	—
5	0.75	BK / GN	1389	Variable Swirl Valve Open Control	I	—

Q37LF Shock Absorber Actuator - Left Front (Z45)



2717066

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

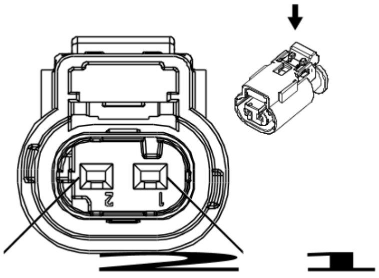
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q37LF Shock Absorber Actuator - Left Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / WH	1107	Left Front Shock Absorber Actuator Control	I	—
2	0.75	GY	1113	Left Front Shock Absorber Actuator Control	I	—

Q37LR Shock Absorber Actuator - Left Rear (Z45)



2717066

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

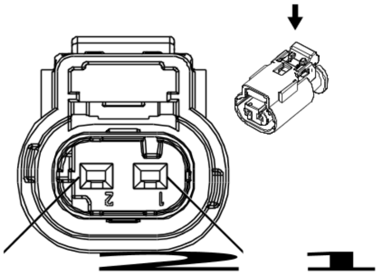
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q37LR Shock Absorber Actuator - Left Rear (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / GY	1114	Left Rear Shock Absorber Actuator Control	I	—
2	0.75	GN / VT	1115	Left Rear Shock Absorber Actuator Control	I	—

Q37RF Shock Absorber Actuator - Right Front (Z45)



2717066

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

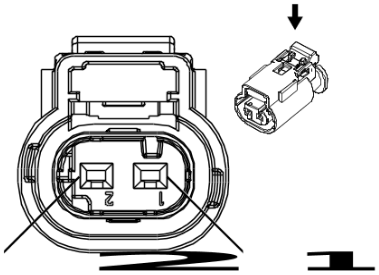
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q37RF Shock Absorber Actuator - Right Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / WH	1116	Right Front Shock Absorber Actuator Control	I	—
2	0.75	GY	1117	Right Front Shock Absorber Actuator Control	I	—

Q37RR Shock Absorber Actuator - Right Rear (Z45)



2717066

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

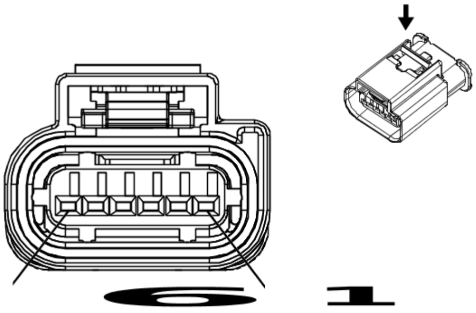
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q37RR Shock Absorber Actuator - Right Rear (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / GN	1118	Right Rear Shock Absorber Actuator Control	I	—
2	0.75	GN / GY	1119	Right Rear Shock Absorber Actuator Control	I	—

Q38 Throttle Body (L3B/L82/L84/L87/LV3)



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6 <p01>-Way F 1.2 MCON Series, Sealed(BK)

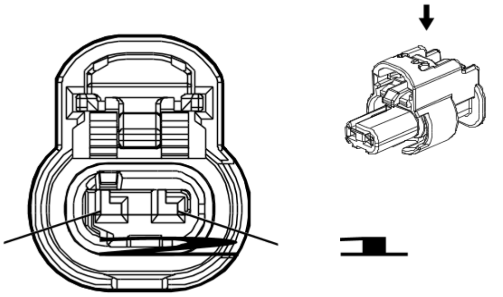
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q38 Throttle Body (L3B/L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	YE YE	581 581	Throttle Actuator Open Control Throttle Actuator Open Control	I I	L3B L82/ L84/ L87
2	0.5 0.5	BN / WH BN / WH	582 582	Throttle Actuator Close Control Throttle Actuator Close Control	I I	L3B L82/ L84/ L87
3	0.5 0.5	BU / WH BU / WH	3630 3630	Throttle Position Sensor SENT 1 Signal Throttle Position Sensor SENT 1 Signal	I I	L3B L82/ L84/ L87
4	0.5 0.5	BK / BN BK / BN	2752 2752	Throttle Position Sensor Low Reference Throttle Position Sensor Low Reference	I I	L3B L82/ L84/ L87
5	0.5 0.5	BN / RD BN / RD	2701 2701	Throttle Position Sensor 5V Reference Throttle Position Sensor 5V Reference	I I	L3B L82/ L84/ L87
6	—	—	—	Not Occupied	—	—

Q40 Turbocharger Bypass Solenoid Valve (L3B)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

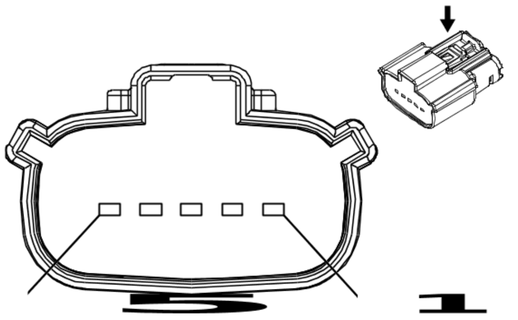
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q40 Turbocharger Bypass Solenoid Valve (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	0.75	GN	3060	Turbocharger Bypass Solenoid Valve Control Bank 1	I	—

Q43 Valve Lifter Oil Manifold Assembly (LV3)



3240108

Connector Part Information

Harness Type: Engine
OEM Connector: 33471-0536
Service Connector: 19301721
Description: 5 <p01>-Way F 1.5 Series, Sealed(BK)

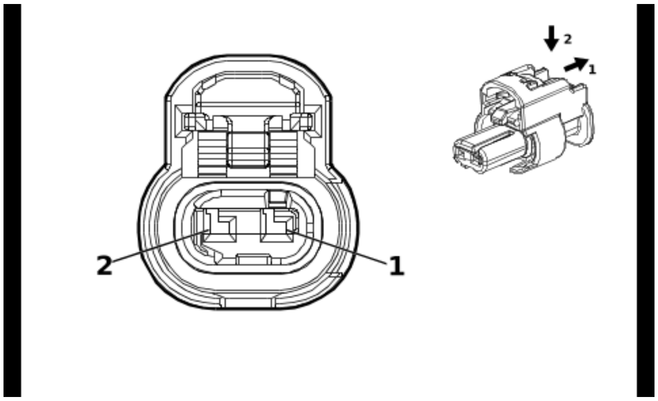
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

Q43 Valve Lifter Oil Manifold Assembly (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	GN	5492	Cylinder Deactivation Solenoid Valve Control 2	I	—

Q44 Engine Oil Pressure Control Solenoid Valve (L3B)



4036662

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

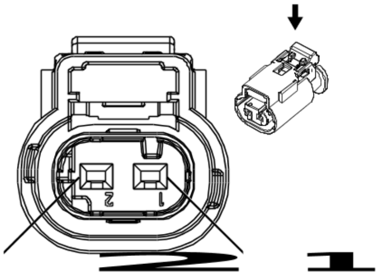
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q44 Engine Oil Pressure Control Solenoid Valve (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	106	Oil Pump Motor Control	I	—
2	0.5	BU	179	Engine Oil Pump Control	I	—

Q44 Engine Oil Pressure Control Solenoid Valve (L87)



2717066

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

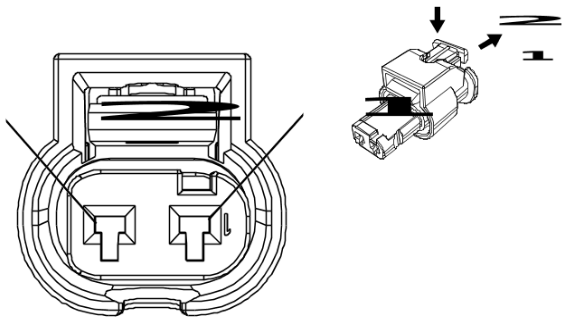
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q44 Engine Oil Pressure Control Solenoid Valve (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	0.5	BU	179	Engine Oil Pump Control	I	—

Q44 Engine Oil Pressure Control Solenoid Valve (LM2)



4284830

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13587570
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BN)

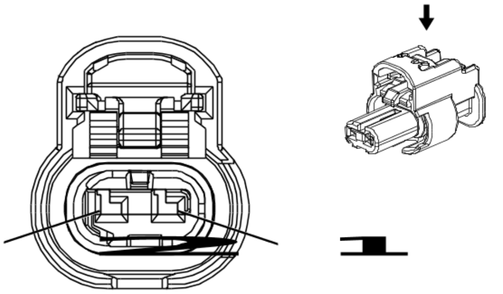
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q44 Engine Oil Pressure Control Solenoid Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	106	Oil Pump Motor Control	I	—
2	0.5	BU	179	Engine Oil Pump Control	I	—

Q46 A/C Compressor Solenoid Valve


4335931

Connector Part Information

Harness Type: Engine
OEM Connector: 33371691
Service Connector: 19366843
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

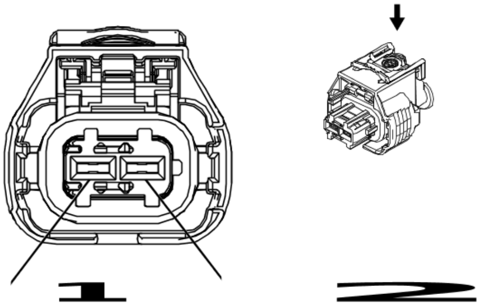
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q46 A/C Compressor Solenoid Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / YE	7574	A/C Compressor Solenoid Valve Control	I	—
2	0.5	BU / BN	7573	A/C Compressor Solenoid Valve Control	I	—

Q61 Reductant Injector (LM2)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 1928405714
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

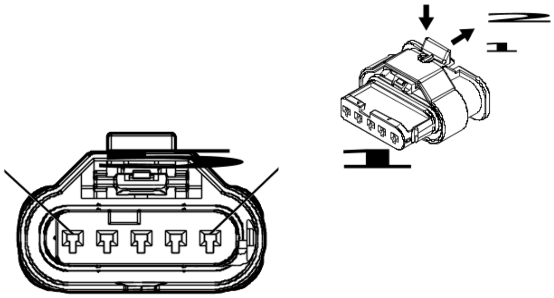
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q61 Reductant Injector (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / WH	3100	Diesel Exhaust Fluid Dosing Valve Low Control	I	—
2	0.75	BN	3099	Diesel Exhaust Fluid Dosing Valve High Control	I	—

Q74 Engine Coolant Bypass Valve (L3B)



4994456

Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5 <p01>-Way F 1.2 MCON-LL Series, Sealed(NA)

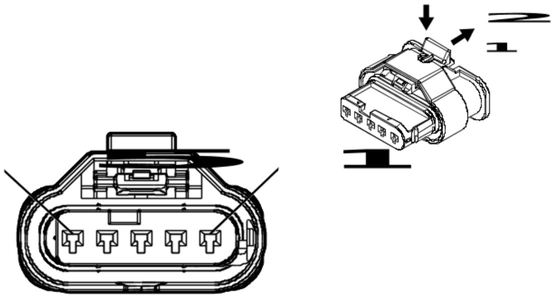
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q74 Engine Coolant Bypass Valve (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	2976	Coolant Diverter Valve Actuator Control Open	I	—
2	0.75	BU / BN	2977	Coolant Diverter Valve Actuator Control Close	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.5	BK / BU	2979	Coolant Diverter Valve Position Sensor Low Reference	I	—
5	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

Q74 Engine Coolant Bypass Valve (LM2)



4994456

Connector Part Information

Harness Type: Engine
OEM Connector: 2-2236898-5
Service Connector: 19371191
Description: 5 <p01>-Way F 1.2 MCON-LL Series, Sealed(NA)

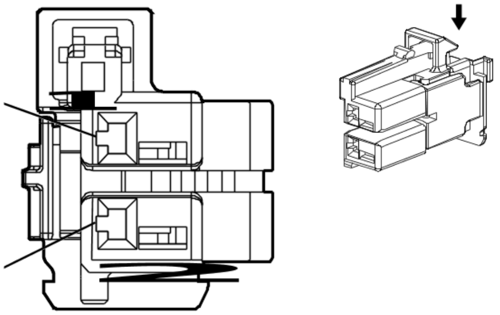
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q74 Engine Coolant Bypass Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	2976	Coolant Diverter Valve Actuator Control Open	I	—
2	0.75	BU / BN	2977	Coolant Diverter Valve Actuator Control Close	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.5	BU / GY	2978	Coolant Diverter Valve Position Signal	I	—
5	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

Q77A Transmission Control Solenoid Valve 1 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

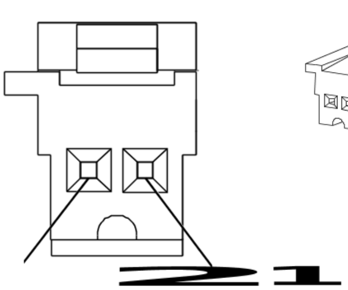
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77A Transmission Control Solenoid Valve 1 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	BU / GN	6404	Clutch Solenoid Valve E Control	I	—

Q77A Transmission Control Solenoid Valve 1 (MQE)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(VT)

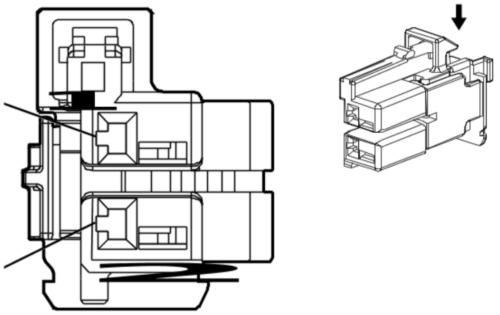
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77A Transmission Control Solenoid Valve 1 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6400	Clutch Solenoid Valve A Control	I	—
2	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77B Transmission Control Solenoid Valve 2 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

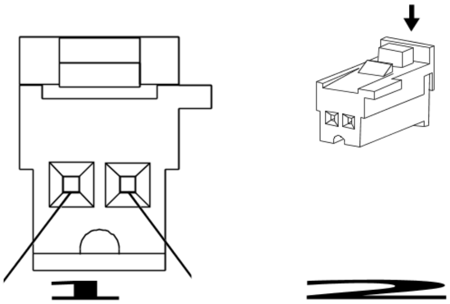
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77B Transmission Control Solenoid Valve 2 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	GN / BN	6403	Clutch Solenoid Valve D Control	I	—

Q77B Transmission Control Solenoid Valve 2 (MQE)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(GY)

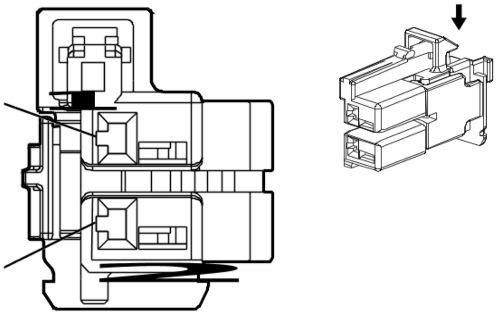
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77B Transmission Control Solenoid Valve 2 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	6401	Clutch Solenoid Valve B Control	I	—
2	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77C Transmission Control Solenoid Valve 3 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

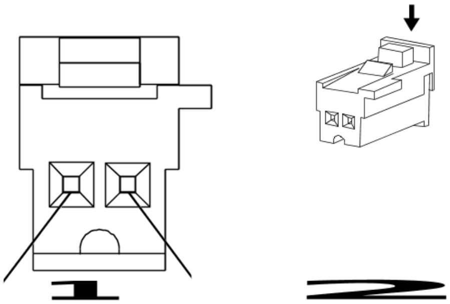
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77C Transmission Control Solenoid Valve 3 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	GY	6402	Clutch Solenoid Valve C Control	I	—

Q77C Transmission Control Solenoid Valve 3 (MQE)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(GY)

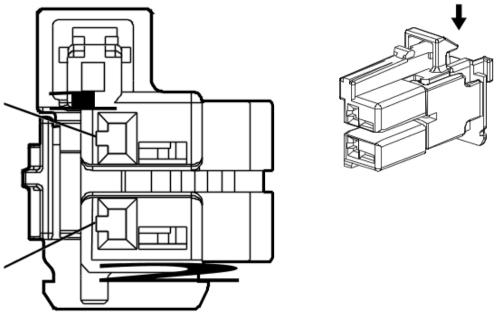
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77C Transmission Control Solenoid Valve 3 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	6402	Clutch Solenoid Valve C Control	I	—
2	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77D Transmission Control Solenoid Valve 4 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

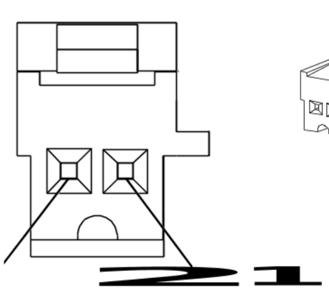
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77D Transmission Control Solenoid Valve 4 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	BN / WH	4509	Transmission Clutch F Control	I	—

Q77D Transmission Control Solenoid Valve 4 (MQE)



4008636

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13947283
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(NA)

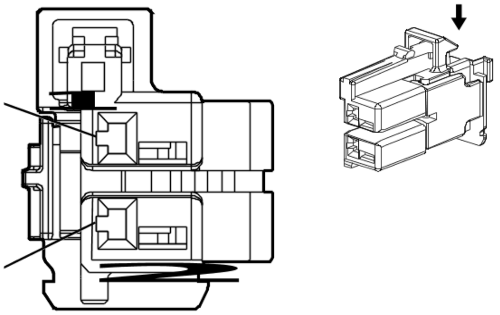
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77D Transmission Control Solenoid Valve 4 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	4508	Transmission Clutch G Control	I	—
2	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	I	—

Q77E Transmission Control Solenoid Valve 5 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

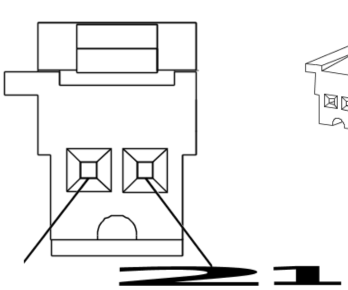
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77E Transmission Control Solenoid Valve 5 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	YE / VT	4507	Transmission Clutch H Control	I	—

Q77E Transmission Control Solenoid Valve 5 (MQE)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(VT)

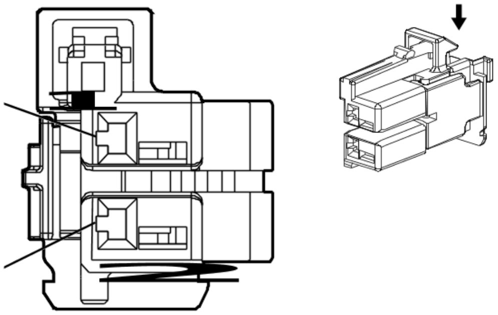
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77E Transmission Control Solenoid Valve 5 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	4507	Transmission Clutch H Control	I	—
2	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	I	—

Q77F Transmission Control Solenoid Valve 6 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

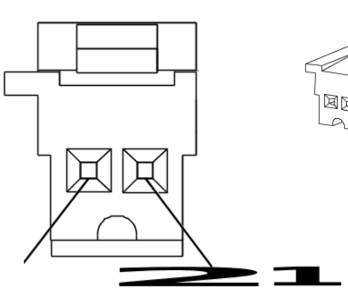
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77F Transmission Control Solenoid Valve 6 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	BU / GY	4508	Transmission Clutch G Control	I	—

Q77F Transmission Control Solenoid Valve 6 (MQE)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(VT)

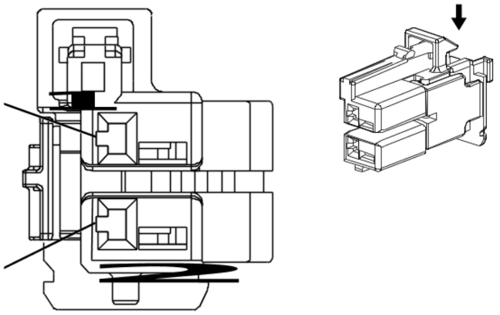
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77F Transmission Control Solenoid Valve 6 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / GN	6403	Clutch Solenoid Valve D Control	I	—
2	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77G Transmission Control Solenoid Valve 7 (MQB)



4364736

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-2
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BU)

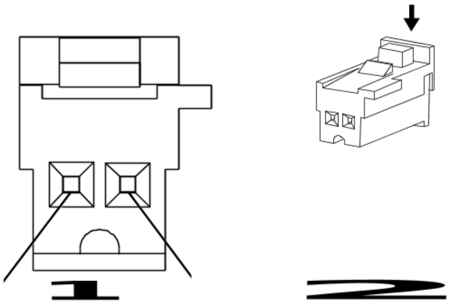
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77G Transmission Control Solenoid Valve 7 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
2	0.5	GN / OG	1530	Transmission Line Pressure Control Solenoid Valve Control	I	—

Q77G Transmission Control Solenoid Valve 7 (MQE)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 0.64 MTS Series(GY)

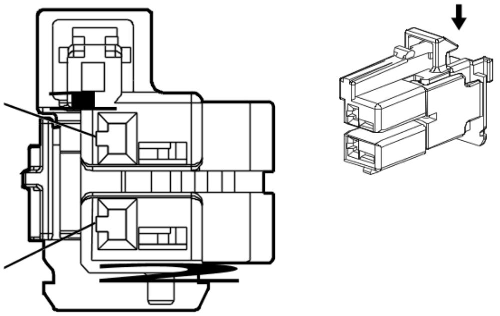
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

Q77G Transmission Control Solenoid Valve 7 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	6404	Clutch Solenoid Valve E Control	I	—
2	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77H Transmission Control Solenoid Valve 8 (MQB)



4672683

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-3
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(GN)

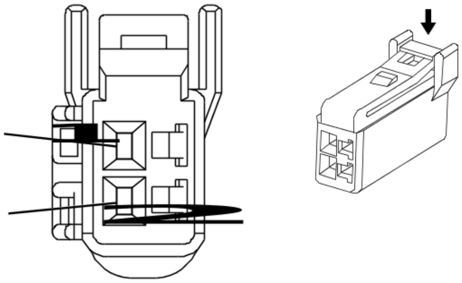
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77H Transmission Control Solenoid Valve 8 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
2	0.5	GY / BN	422	Torque Converter Clutch Solenoid Valve Control	I	—

Q77H Transmission Control Solenoid Valve 8 (MQE)



4051682

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 040 III Series(NA)

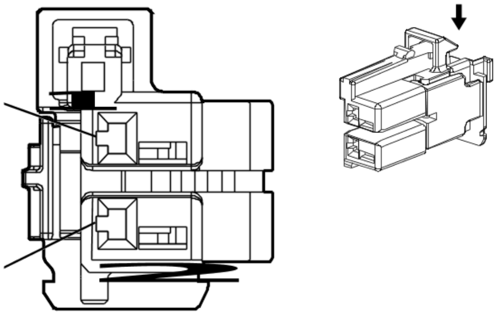
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77H Transmission Control Solenoid Valve 8 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	6380	Torque Converter Clutch Enable Solenoid Valve A Control	I	—
2	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	I	—

Q77J Transmission Control Solenoid Valve 9 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control Extension
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series(BN)

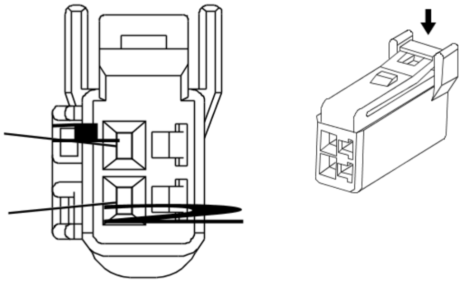
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77J Transmission Control Solenoid Valve 9 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	VT	7819	Default Disable Solenoid Control	I	—

Q77J Transmission Control Solenoid Valve 9 (MQE)



4051682

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 040 III Series(NA)

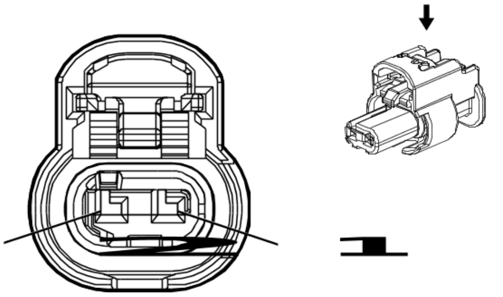
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q77J Transmission Control Solenoid Valve 9 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	6210	Torque Converter Clutch Enable Solenoid Valve B Control	I	—
2	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q80L Engine Mount Solenoid Valve - Left (LM2)



Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296694-3
Service Connector: 19366871
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

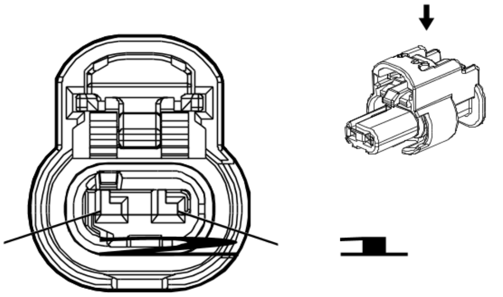
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q80L Engine Mount Solenoid Valve - Left (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / GN	40	Battery Positive Voltage	I	—
2	0.5	BN / BU	4065	Driveline Mount Actuator 1 Control	I	—

Q80R Engine Mount Solenoid Valve - Right (LM2)


4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296694-3
Service Connector: 19366871
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

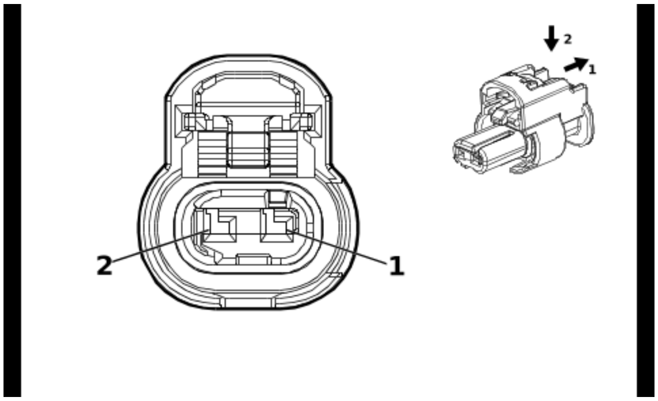
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q80R Engine Mount Solenoid Valve - Right (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / GN	40	Battery Positive Voltage	I	—
2	0.5	BN / YE	4066	Driveline Mount Actuator 2 Control	I	—

Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

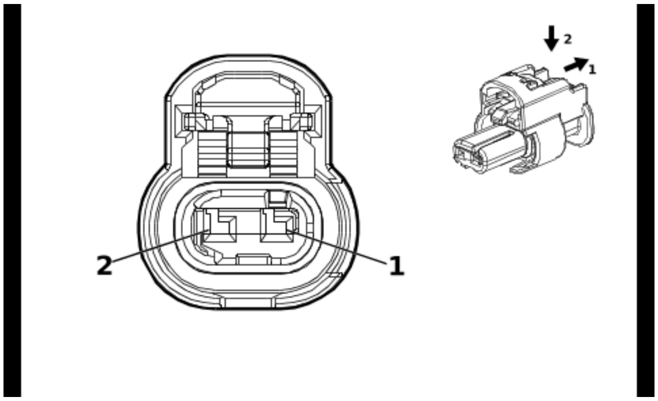
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	2491	Cylinder Shutoff Solenoid Enable Signal 1	I	—
2	0.5	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	I	—

Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

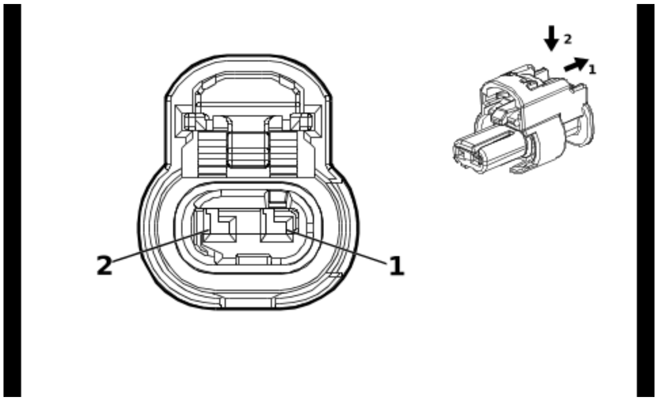
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / GN	2492	Cylinder Shutoff Solenoid Enable Signal 2	I	—
2	0.5	GN	5492	Cylinder Deactivation Solenoid Valve Control 2	I	—

Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

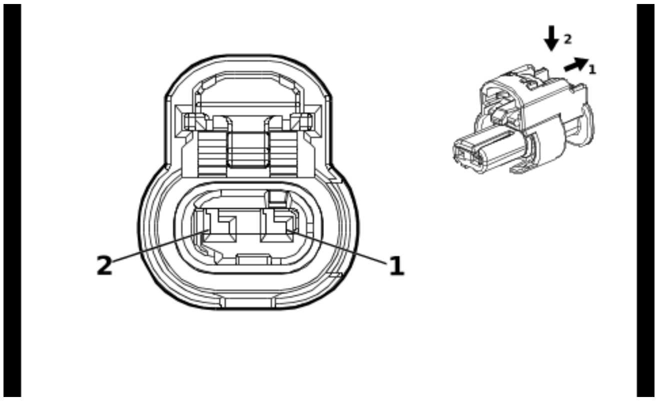
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GY	2493	Cylinder Shutoff Solenoid Enable Signal 3	I	—
2	0.5	GY	5493	Cylinder Deactivation Solenoid Valve Control 3	I	—

Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

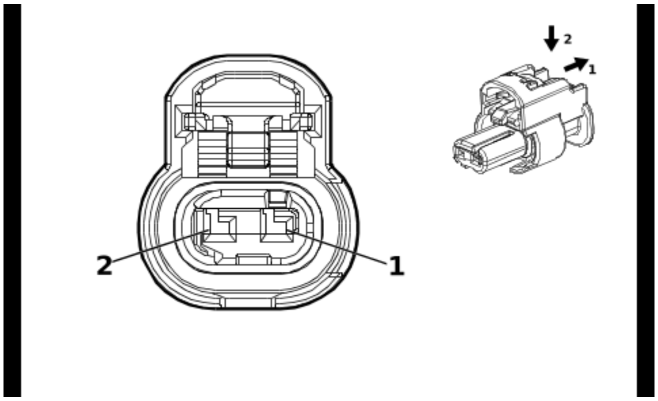
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GN	2494	Cylinder Shutoff Solenoid Enable Signal 4	I	—
2	0.5	YE / BU	5494	Cylinder Deactivation Solenoid Valve Control 4	I	—

Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

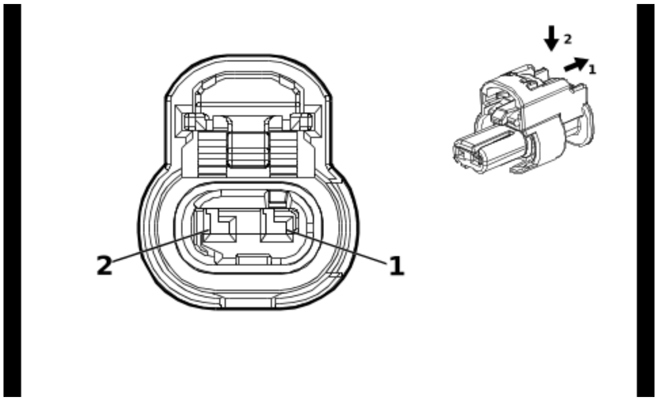
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / VT	2495	Cylinder Shutoff Solenoid Enable Signal 5	I	—
2	0.5	VT	5495	Cylinder Deactivation Solenoid Valve Control 5	I	—

Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

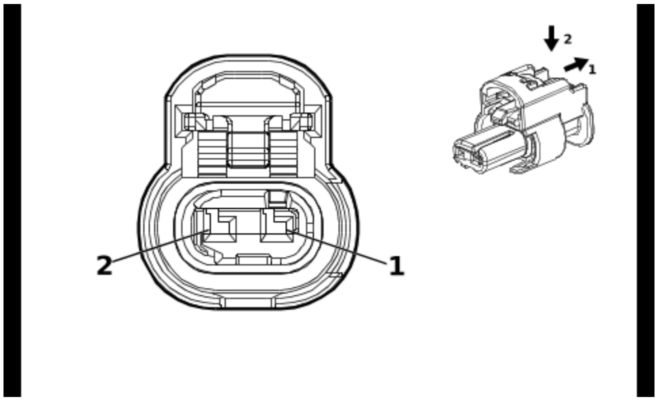
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	2496	Cylinder Shutoff Solenoid Enable Signal 6	I	—
2	0.5	BN	5496	Cylinder Deactivation Solenoid Valve Control 6	I	—

Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

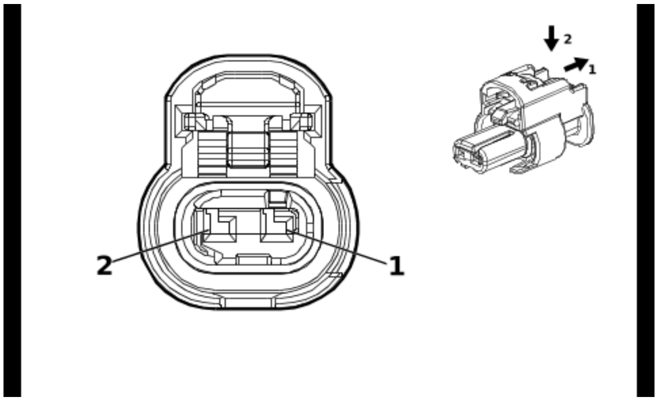
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	2497	Cylinder Shutoff Solenoid Enable Signal 7	I	—
2	0.5	WH	5497	Cylinder Deactivation Solenoid Valve Control 7	I	—

Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)



4036662

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

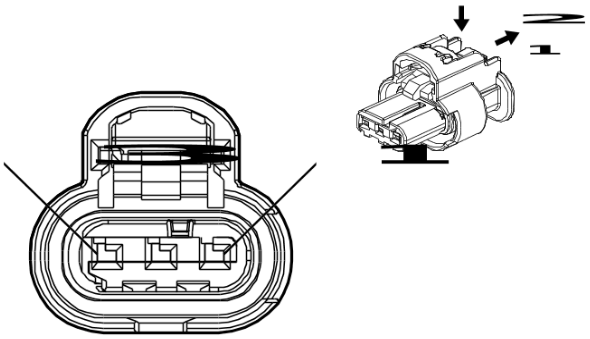
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / YE	2498	Cylinder Shutoff Solenoid Enable Signal 8	I	—
2	0.5	YE	5498	Cylinder Deactivation Solenoid Valve Control 8	I	—

Q97B Engine Coolant Flow Control Valve - Block (L3B)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19371206
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

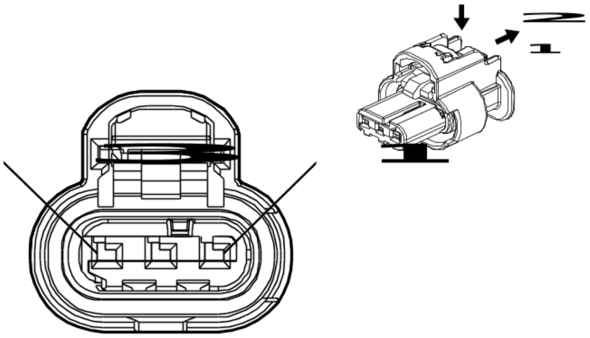
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q97B Engine Coolant Flow Control Valve - Block (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
2	0.75	BK	4450	Ground	I	—
3	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—

Q97B Engine Coolant Flow Control Valve - Block (LM2)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 1-2296695-2
Service Connector: 19371199
Description: 3 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

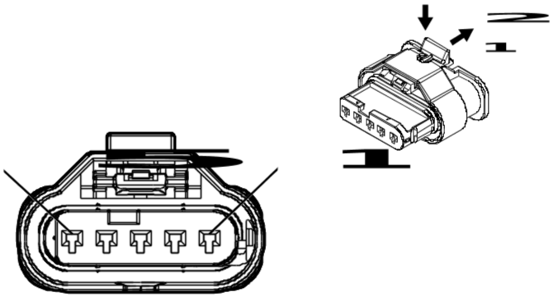
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q97B Engine Coolant Flow Control Valve - Block (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
2	1	BK	4450	Ground	I	—
3	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—

Q97M Engine Coolant Flow Control Valve - Main (LM2)



4994456

Connector Part Information

Harness Type: Engine
OEM Connector: 2-2236898-5
Service Connector: 19371191
Description: 5 <p01>-Way F 1.2 MCON-LL Series, Sealed(NA)

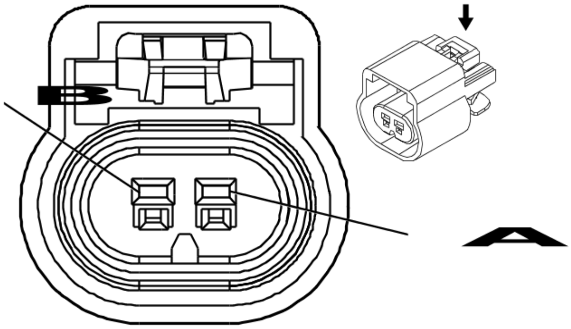
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

Q97M Engine Coolant Flow Control Valve - Main (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / BN	2972	Coolant Flow Control Actuator Control Close	I	—
2	0.75	GY / BU	2971	Coolant Flow Control Actuator Control Open	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.5	GY	2973	Coolant Flow Control Valve Position Signal	I	—
5	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

R6A Terminating Resistor - High Speed Bus



523630

Connector Part Information

Harness Type: Chassis
OEM Connector: 13510085
Service Connector: 13580114
Description: 2 <p01>-Way F 150 GT Series, Sealed(BK)

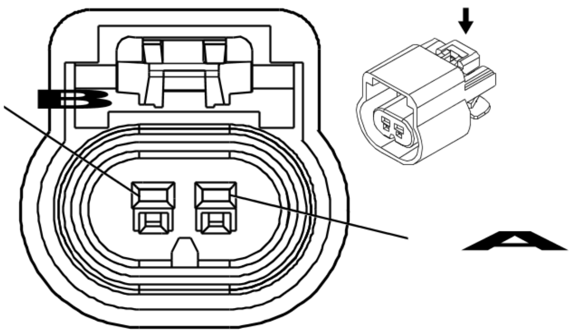
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

R6A Terminating Resistor - High Speed Bus

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
B	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—

R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)



523630

Connector Part Information

Harness Type: Headliner
OEM Connector: 13510085
Service Connector: 13580114
Description: 2 <p01>-Way F 150 GT Series, Sealed(BK)

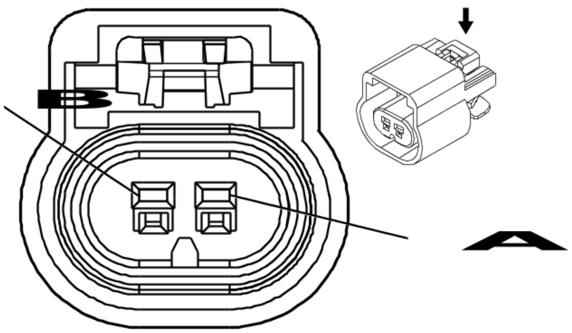
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU / GY	3935	High Speed GMLAN Serial Data [+] 8	I	—
B	0.35	WH / GY	3936	High Speed GMLAN Serial Data [-] 8	I	—

R6F Terminating Resistor - High Speed Extension Bus 2 ((IOS/IOT)-U1D-SUR)



523630

Connector Part Information

Harness Type: Chassis
OEM Connector: 13510085
Service Connector: 13580114
Description: 2 <p01>-Way F 150 GT Series, Sealed(BK)

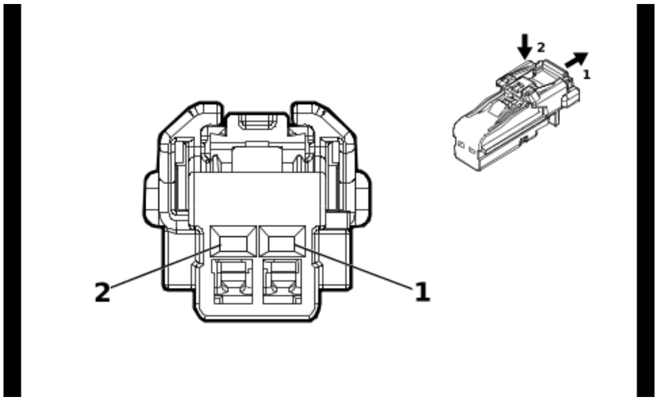
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

R6F Terminating Resistor - High Speed Extension Bus 2 ((IOS/IOT)-U1D-SUR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BU / GN	1304	High Speed GMLAN Serial Data [+] 9	I	—
B	0.5	WH / GN	1305	High Speed GMLAN Serial Data [-] 9	I	—

S2 Transmission Manual Shift Switch



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8988
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

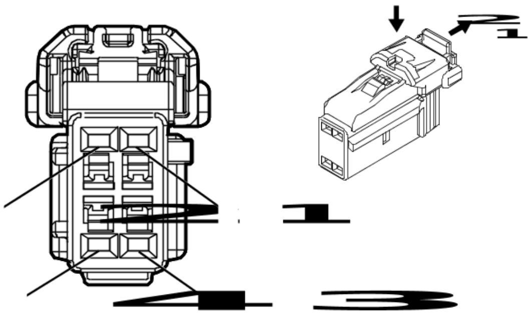
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

S2 Transmission Manual Shift Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / YE	5526	Tap Up/Tap Down Switch Signal	I	—
2	0.5	BK / WH	1851	Signal Ground	I	—

S3 Transmission Shift Lever



4872683

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8435
Service Connector: 19369633
Description: 4 <p01>-Way F 1.2 Series(BK)

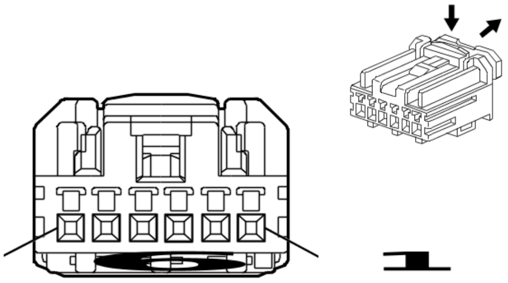
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

S3 Transmission Shift Lever

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / WH	816	Brake Transmission Shift Interlock Solenoid Actuator Control	I	—
2	0.35	BK	1850	Ground	I	—
3	0.35	GN / WH	1932	Shift Select Switch Park Signal	I	—
4	0.35	BK	1850	Ground	I	—

S13D Door Lock Switch - Driver (AU3)



4650256

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 HCM Series(BK)

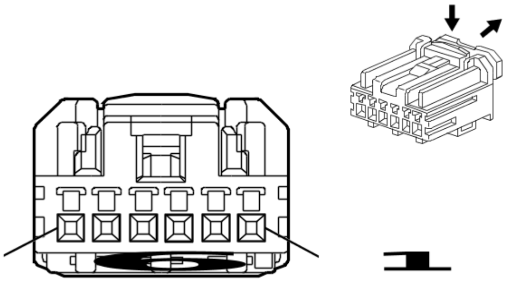
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S13D Door Lock Switch - Driver (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.5	YE YE	6817 6817	LED Backlight Dimming Control 1 LED Backlight Dimming Control 1	I I	A45/ AU3 AU3
2	0.5	BN / YE	780	Driver Door Lock Switch Lock Signal	I	AU3
3	0.35	BN / WH	781	Driver Door Lock Switch Unlock Signal	I	—
4	0.35	BK	1150	Ground	I	—
5 - 6	—	—	—	Not Occupied	—	—

S13P Door Lock Switch - Passenger (AU3)



4650256

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 HCM Series(BK)

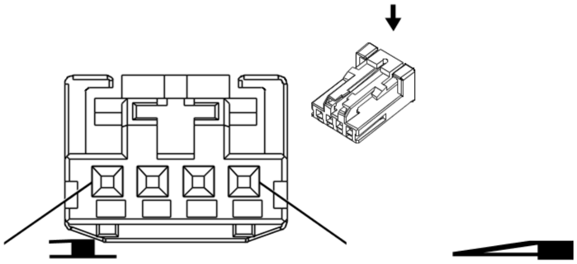
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S13P Door Lock Switch - Passenger (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
2	0.35	YE / VT	244	Passenger Door Lock Switch Lock Control	I	—
3	0.35	BN / VT	245	Passenger Door Lock Switch Unlock Control	I	—
4	0.35	BK	1250	Ground	I	—
5 - 6	—	—	—	Not Occupied	—	—

S27 Head-Up Display Switch (UV6)



2717162

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 1-936119-1
Service Connector: 19367524
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

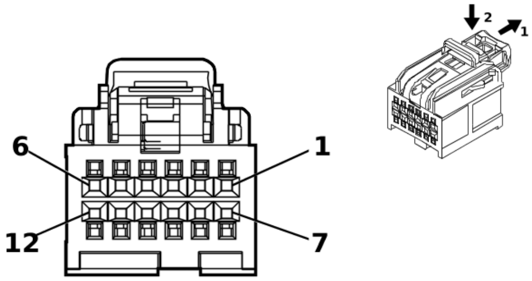
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S27 Head-Up Display Switch (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
2	0.35	BK	1850	Ground	I	—
3	0.35	BK / GN	5699	Head-Up Display Switch Low Reference	I	—
4	0.35	YE / WH	622	Head-Up Display Switch Signal	I	—

S30 Headlamp Switch



4975223

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016616
Service Connector: 13519750
Description: 12 <p01>-Way F 0.64 OCS Series(BK)

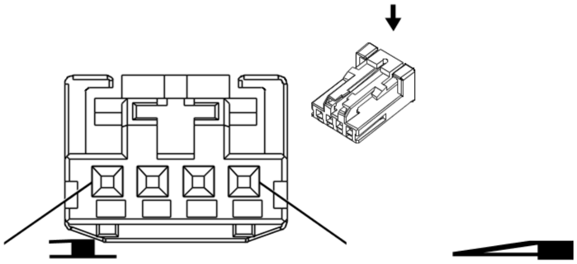
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300660	J-35616-64B (LT BU)	J-38125-12A

S30 Headlamp Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / VT	103	Headlamp Switch On Signal	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	GN / BN	306	Headlamp Switch Off Signal	I	—
4	0.35	GY	158	Cargo Lamp Switch Signal	I	—
5	0.35	GN / GY	13	Headlamp Switch Park Lamp Signal	I	—
6	0.5	WH / VT	1430	Exterior Courtesy Lamp Control	I	—
7	0.35	WH / GY	2935	Task Lamp Switch Signal	I	U12
8	0.35	BK / WH	1851	Signal Ground	I	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	WH / BN	7555	Headlamp Switch Signal	I	—
12	0.35	YE	7556	Headlamp Switch Reference	I	—

S32R Seat Heating Switch - Rear (D07+KA6)



Connector Part Information

Harness Type: Floor Console
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

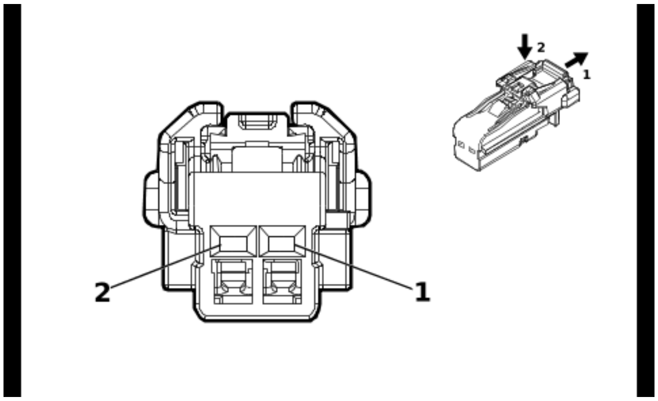
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S32R Seat Heating Switch - Rear (D07+KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	1340	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN / WH	4115	Body Control Module LIN Bus 5	I	—
4	0.5	BK	1250	Ground	I	—

S33 Horn Switch



4115691

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13588640
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 Series(BK)

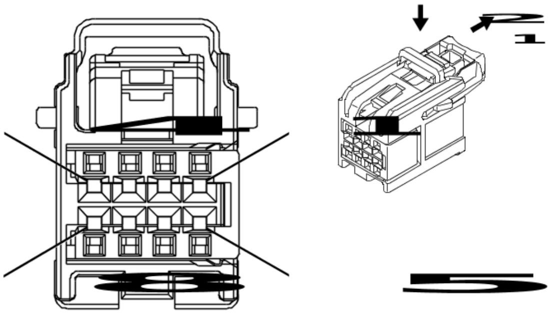
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

S33 Horn Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1850	Ground	I	—
2	—	RD	3287	Horn Switch Signal	I	—

S38 Ignition Mode Switch (BTM)



4232228

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526973
Service Connector: 19353873
Description: 8 <p01>-Way F 0.64 OCS Series(GY)

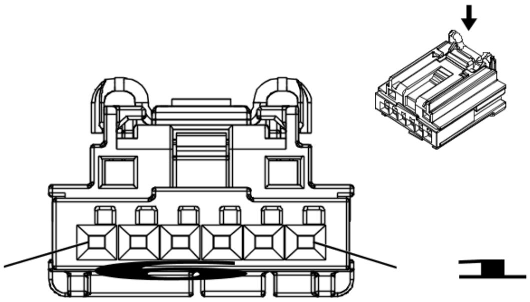
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S38 Ignition Mode Switch (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BK	5719	Ignition Mode Switch Start LED Signal	I	—
2	0.35	BN / BK	5720	Ignition Mode Switch Accessory LED Signal	I	—
3	0.35	BK / WH	1851	Signal Ground	I	—
4	0.35	BU / GN	5723	Ignition Mode Switch Mode Voltage	I	—
5	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	BK / GY	3559	Passive Start Switch 2 Low Reference	I	—
8	0.35	GN / BK	3558	Passive Start Switch Signal 2	I	—

S39 Ignition Switch (-BTM)



3960313

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2035363-4
Service Connector: 19332786
Description: 6 <p01>-Way F 0.64 Generation Y Series(BK)

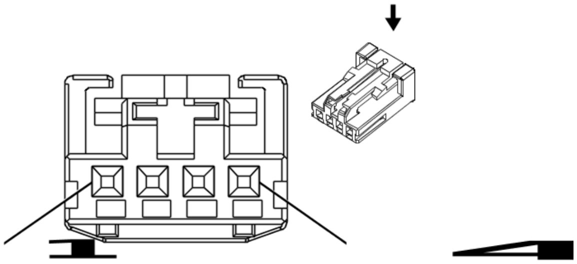
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S39 Ignition Switch (-BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / BK	1073	Ignition Key Resistor Signal	I	—
2	0.5	WH / VT	1020	Off/Run/Crank Ignition Voltage	I	—
3	0.35	VT / YE	4	Accessory Ignition Voltage	I	—
4	0.35	RD / BU	540	Battery Positive Voltage	I	—
5	0.35	VT / BK	3	Run/Crank Ignition 1 Voltage	I	—
6	0.5	WH / VT	1020	Off/Run/Crank Ignition Voltage	I	—

S47D Seat Memory Switch - Driver (A45)



2717162

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

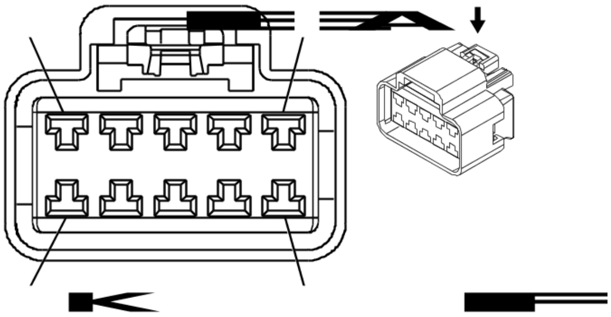
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S47D Seat Memory Switch - Driver (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
2	0.35	BK / BU	5978	Memory Switch Low Reference	I	—
3	0.35	WH	615	Seat Memory Switch Signal 1	I	—
4	0.35	BU / GN	614	Seat Memory Switch Set Signal	I	—

S64D Seat Adjuster Switch - Driver (A2X-A45)



623046

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 15326931
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 280 GT Series(BK)

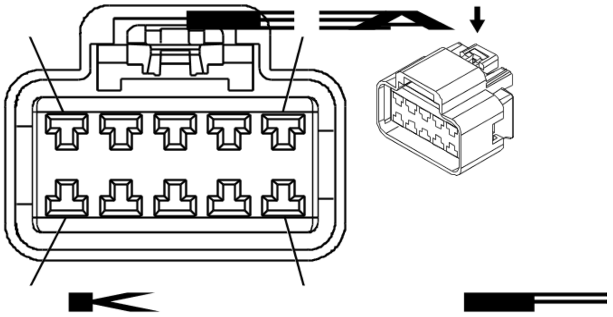
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S64D Seat Adjuster Switch - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	GN / BN	286	Driver Seat Front Vertical Motor Up Control	I	—
B	2.5	BK	1150	Ground	I	—
C	1.5	GY / GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
D	1.5	YE / BU	285	Driver Seat Horizontal Motor Forward Control	I	—
E	2.5	RD / YE	5040	Battery Positive Voltage	I	—
F	1.5	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
G	1.5	BU / YE	277	Driver Seat Recline Motor Rearward Control	I	—
H	1.5	GN / YE	276	Driver Seat Recline Motor Forward Control	I	—
J	1.5	GY / BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
K	1.5	BU / VT	287	Driver Seat Front Vertical Motor Down Control	I	—

S64D Seat Adjuster Switch - Driver (A45)



623046

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 15326931
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 280 GT Series(BK)

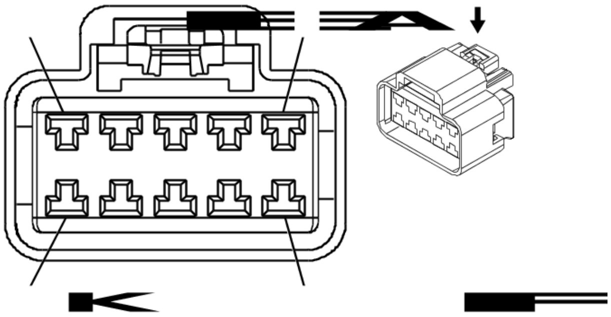
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S64D Seat Adjuster Switch - Driver (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN / BN	1518	Seat Front Vertical Up Switch Signal	I	—
B	—	—	—	Not Occupied	—	—
C	0.5	GY / GN	1523	Seat Horizontal Rearward Switch Signal	I	—
D	0.5	YE / BN	1522	Seat Horizontal Forward Switch Signal	I	—
E	0.5	BK	1150	Ground	I	—
F	0.5	YE	1519	Seat Rear Vertical Up Switch Signal	I	—
G	0.5	GN / GY	1270	Seat Recline Rearward Switch Signal	I	—
H	0.5	GY / BK	1269	Seat Recline Forward Switch Signal	I	—
J	0.5	YE / BU	1521	Seat Rear Vertical Down Switch Signal	I	—
K	0.5	BU / VT	1520	Seat Front Vertical Down Switch Signal	I	—

S64P Seat Adjuster Switch - Passenger (A7K)



623046

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 15326931
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 280 GT Series(BK)

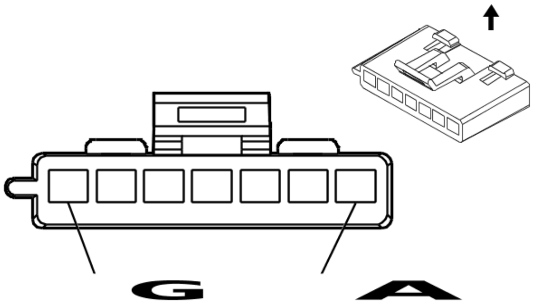
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S64P Seat Adjuster Switch - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	GN / BU	298	Passenger Seat Front Vertical Motor Down Control	I	—
B	2.5	BK	1250	Ground	I	—
C	1.5	YE / BU	290	Passenger Seat Horizontal Motor Rearward Control	I	—
D	1.5	YE / WH	296	Passenger Seat Horizontal Motor Forward Control	I	—
E	2.5	RD / BN	1440	Battery Positive Voltage	I	—
F	1.5	BU / WH	289	Passenger Seat Rear Vertical Motor Down Control	I	—
G	1.5	BU / BN	77	Passenger Seat Recline Motor Rearward Control	I	—
H	1.5	GN	76	Passenger Seat Recline Motor Forward Control	I	—
J	1.5	GN / WH	288	Passenger Seat Rear Vertical Motor Up Control	I	—
K	1.5	GN / VT	297	Passenger Seat Front Vertical Motor Up Control	I	—

S65D Seat Lumbar Support Switch - Driver (A2X-A45)



73146

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12052854
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way F 280 Metri-Pack Series(BK)

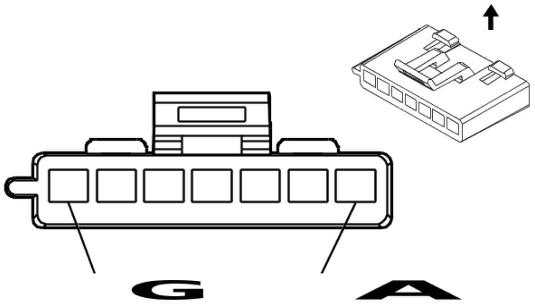
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S65D Seat Lumbar Support Switch - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	—	—	Not Occupied	—	—
B	0.75	VT	610	Driver Seat Lumbar Support Motor Backward Control	I	—
C	0.75	BU	611	Driver Seat Lumbar Support Motor Forward Control	I	—
D	—	—	—	Not Occupied	—	—
E	0.75	BK	1150	Ground	I	—
F	—	—	—	Not Occupied	—	—
G	0.75	RD / YE	8840	Battery Positive Voltage	I	—

S65P Seat Lumbar Support Switch - Passenger (A7K)



73146

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12052854
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way F 280 Metri-Pack Series(BK)

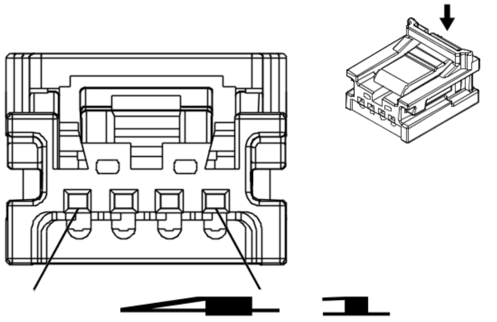
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S65P Seat Lumbar Support Switch - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	—	—	Not Occupied	—	—
B	0.75	VT	210	Passenger Seat Lumbar Support Motor Backward Control	I	—
C	0.75	BU	211	Passenger Seat Lumbar Support Motor Forward Control	I	—
D	—	—	—	Not Occupied	—	—
E	0.75	BK	1250	Ground	I	—
F	—	—	—	Not Occupied	—	—
G	0.75	RD / YE	8840	Battery Positive Voltage	I	—

S70E Steering Wheel Controls Switch - Radio Presets (UK3)



4215060

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507113
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F Mini 50 Series(BK)

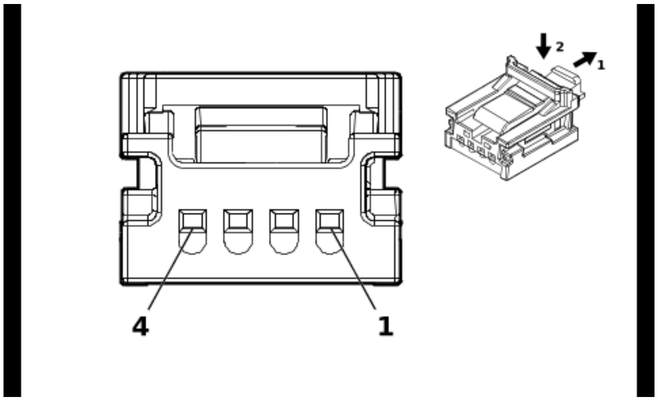
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70E Steering Wheel Controls Switch - Radio Presets (UK3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	BN / RD	4313	Radio Favorite Forward Switch Signal	I	—
3	—	BN / RD	4312	Radio Favorite Back Switch Signal	I	—
4	—	—	—	Not Occupied	—	—

S70F Steering Wheel Controls Switch - Radio Volume (UK3)



5493584

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507115
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F Mini 50 Series(GY)

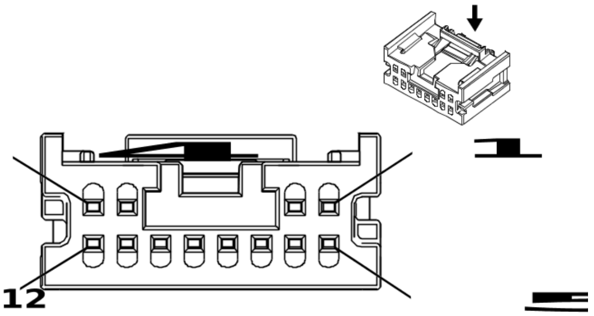
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70F Steering Wheel Controls Switch - Radio Volume (UK3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1050	Ground	I	—
2	0.35	GN / RD	4314	Radio Volume Down Switch Signal	I	—
3	0.35	OG / RD	4315	Radio Volume Up Switch Signal	I	—
4	—	—	—	Not Occupied	—	—

S70L Steering Wheel Controls Switch - Left



3824362

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507121
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way F Mini 50 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70L Steering Wheel Controls Switch - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	3040	Battery Positive Voltage	I	K34
2	0.35 0.35	PK YE	3893 6817	Steering Wheel LED Backlight Dimming Control LED Backlight Dimming Control 1	I	UK3 - UK3
3	0.35	GN / OG	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4	0.35	VT	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	UEU/ UHX
5	—	—	—	Not Occupied	—	—
6	0.35	BK	1050	Ground	I	—
7	0.35	GY / OG	5884	Steering Wheel Heating Switch LED Control	I	KI3
8	0.35	GN	5883	Steering Wheel Heating Switch Signal	I	KI3
9	0.35	BK / RD	3892	Indicator Dimming Control 2	I	UK3
10	0.35	BU	1444	12V Reference	I	UEU/ UHX
11 - 12	—	—	—	Not Occupied	—	—

S70R Steering Wheel Controls Switch - Right

—

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13593917
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way

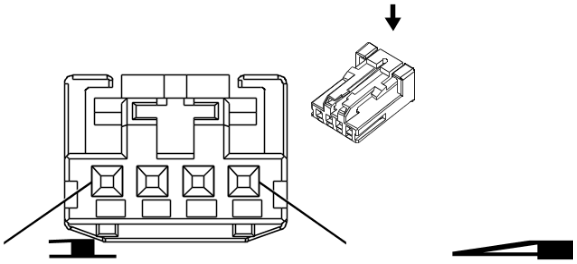
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70R Steering Wheel Controls Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	3040	Battery Positive Voltage	I	—
2	0.5	PK	3893	Steering Wheel LED Backlight Dimming Control	I	UK3
3	0.5	BK / BU	3894	Instrument Cluster LIN Bus 1	I	—
6	0.35	BK	1050	Ground	I	—
7	0.35	BN / RD	4313	Radio Favorite Forward Switch Signal	I	—
8	0.35	BN / RD	4312	Radio Favorite Back Switch Signal	I	—
9	0.5	BK / RD	3892	Indicator Dimming Control 2	I	UK3
10	0.35	OG / RD	4315	Radio Volume Up Switch Signal	I	—
11	0.35	GN / RD	4314	Radio Volume Down Switch Signal	I	—

S76 Trailer Brake Control Switch (JL1)



2717162

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 1-936119-1
Service Connector: 19367524
Description: 4 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

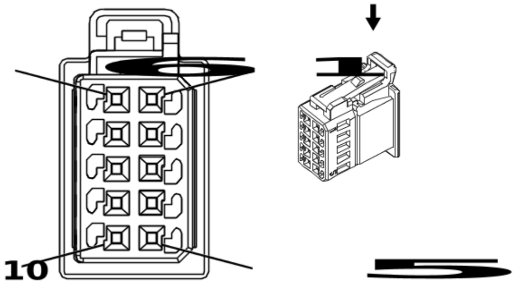
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S76 Trailer Brake Control Switch (JL1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / GN	5140	Battery Positive Voltage	I	—
2	0.35	GN / BU	2733	Electronic Brake Control Module LIN Bus 2	I	—
3	0.35	BK / WH	1851	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

S78 Turn Signal/Multifunction Switch



2830955

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 1488973-1
Service Connector: 19299776
Description: 10 <p01>-Way F 0.64 Micro-Quadlock Series(BK)

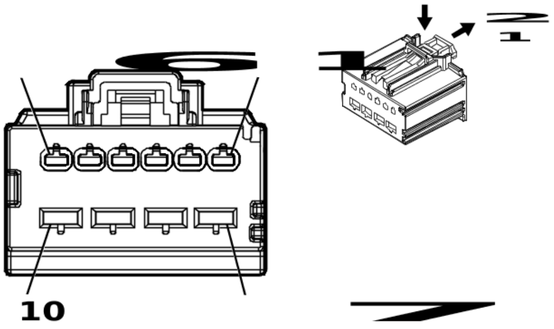
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (LT BU)	J-38125-12A

S78 Turn Signal/Multifunction Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / GN	663	Hazard Switch Left Turn Signal	I	—
2	0.5	VT / BU	664	Hazard Switch Right Turn Signal	I	—
3	0.5	BK / WH	1851	Signal Ground	I	—
4	0.5	WH / GY	3849	Automatic High Beam On/Off Switch Signal	I	—
5	0.35	WH / BK	94	Windshield Washer Switch Signal	I	—
6	0.5	YE / BN	307	Headlamp Switch Flash Signal	I	—
7	0.5	WH	524	High Beam Select Switch High Beam Signal	I	—
8	0.5	BK / GY	6009	Windshield Wiper Switch Low Reference	I	—
9	0.5	GY	1715	Windshield Wiper Switch High Signal	I	—
10	0.5	YE / BU	1714	Windshield Wiper Switch Low Signal	I	—

S79LR Window Switch - Left Rear (AEQ+(EXTENDED CAB/CREW CAB))



5035058

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 35152553
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 1.5, 2.8 MX Series(BK)

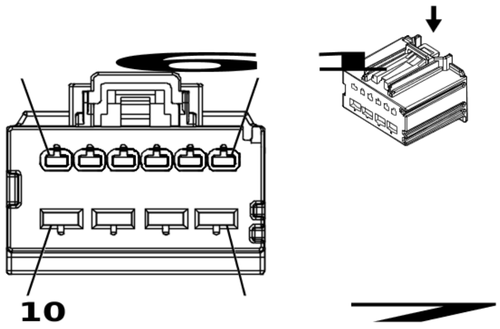
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

S79LR Window Switch - Left Rear (AEQ+(EXTENDED CAB/CREW CAB))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	6135	Body Control Module LIN Bus 4	I	—
2	0.5	GY	747	Left Rear Door Ajar Switch Signal	I	AEQ
3	0.75	BK	1150	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	2.5	BK	1150	Ground	II	—
8	2.5	RD / BU	1842	Battery Positive Voltage	II	—
9	2	BU / VT	668	Left Rear Window Motor Up Control	II	—
10	2	YE / BU	669	Left Rear Window Motor Down Control	II	—

S79P Window Switch - Passenger (AED)



3791446

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 1.5, 2.8 STAC Series(BK)

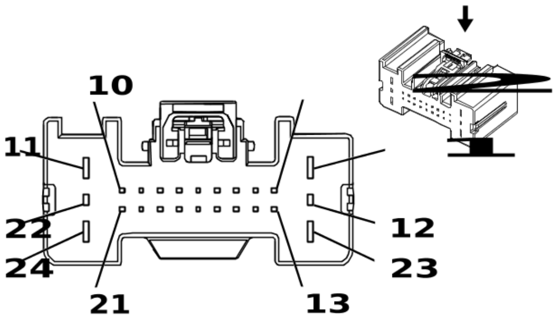
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

S79P Window Switch - Passenger (AED)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / YE	6134	Body Control Module LIN Bus 3	I	—
2	0.5	GY	746	Right Front Door Ajar Switch Signal	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	2.5	BK	1250	Ground	II	—
8	2.5	RD / WH	1340	Battery Positive Voltage	II	—
9	2.5	GN / GY	3387	Passenger Window Motor Up Control	II	—
10	2.5	YE / BU	3388	Passenger Window Motor Down Control	II	—

S79P Window Switch - Passenger (AEF)



Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24 <p01>-Way F 0.64, 1.5, 2.8 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required
IV	Not required	J-35616-64B (LT BU)	No Tool Required

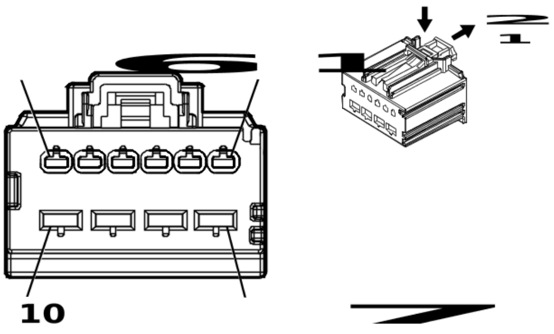
S79P Window Switch - Passenger (AEF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / YE	3385	Window Switch Passenger Down Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN / BK	3396	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	IV	—
4	0.35	YE / VT	3397	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	IV	—
5	0.5	WH	3398	Passenger Outside Rearview Mirror Motor Common Control	IV	—
6	0.35	YE / RD	3399	Passenger Outside Rearview Mirror Position Sensor Voltage Reference	IV	—
7	0.35	BU / YE	3401	Passenger Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal	IV	—
8	0.35	BK / GN	3400	Passenger Outside Rearview Mirror Position Sensor Low Reference	IV	—
9	0.35	VT / WH	3403	Passenger Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal	IV	—
10	0.35	YE	6817	LED Backlight Dimming Control 1	IV	—
11	0.5	YE / BK	3384	Window Switch Passenger Up Signal	II	—
12	0.5	BU / GY	3414	Passenger Outside Rearview Mirror Motor Fold Control	I	—
13	0.35	VT / GY	3386	Window Switch Passenger Express Signal	IV	—
14 - 20	—	—	—	Not Occupied	—	—

S79P Window Switch - Passenger (AEF) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.35	GN / WH	7530	Driver Seat Memory Control Module LIN Bus 1	IV	—
22	0.5	YE / WH	3413	Passenger Outside Rearview Mirror Motor Unfold Control	I	—
23	2.5	RD / WH	1340	Battery Positive Voltage	III	—
24	2.5	BK	1250	Ground	III	—

S79RR Window Switch - Right Rear (AEQ+(EXTENDED CAB/CREW CAB))



5035058

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 35152553
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F 1.5, 2.8 MX Series(BK)

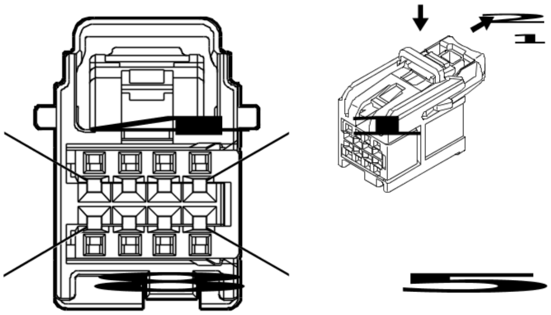
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

S79RR Window Switch - Right Rear (AEQ+(EXTENDED CAB/CREW CAB))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	6135	Body Control Module LIN Bus 4	I	—
2	0.5	GN	748	Right Rear Door Ajar Switch Signal	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	2.5	BK	1250	Ground	II	—
8	2.5	RD / WH	1340	Battery Positive Voltage	II	—
9	2	BU / GY	670	Right Rear Window Motor Up Control	II	—
10	2	GN / BK	671	Right Rear Window Motor Down Control	II	—

S86 Vehicle Stability Control Switch



4935776

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526972
Service Connector: 19370429
Description: 8 <p01>-Way F 0.64 OCS Series(BK)

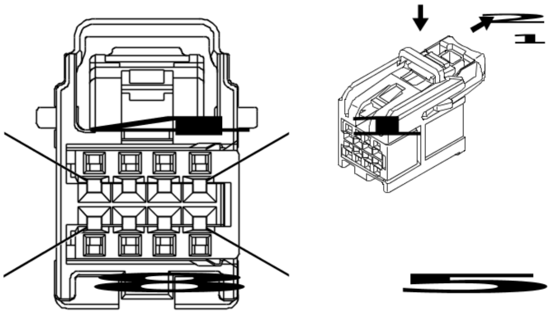
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S86 Vehicle Stability Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / VT	1788	Traction Control Switch Signal 1	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	BN	7291	Major Endgate Release Switch Signal Interior	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	BK	1050	Ground	I	—
7	0.35	GN / WH	111	Hazard Warning Switch Signal	I	—
8	0.35	GY	1198	Endgate Release Switch Analog Signal Interior	I	—

S126 Drive Mode Select Switch (URC)



4232228

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526973
Service Connector: 19353873
Description: 8 <p01>-Way F 0.64 OCS Series(GY)

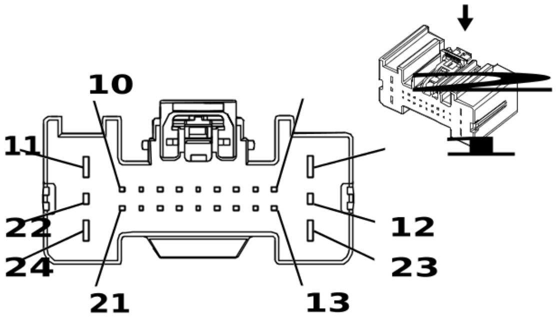
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S126 Drive Mode Select Switch (URC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	I	—
2	0.35	GY	4109	Driver Mode Switch 5V Reference	I	—
3	0.35	BK / GY	2204	Enhanced Driver Mode 1 Switch Low Reference	I	—
4	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
5	0.35	BK	1850	Ground	I	—
6	0.35	VT / BN	300	Run Ignition 3 Voltage	I	—
7	0.35	BN	1560	Neutral Indicator Control	I	—
8	—	—	—	Not Occupied	—	—

S146 Window/Outside Rearview Mirror Switch - Driver



2871905

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24 <p01>-Way F 0.64, 1.5, 2.8 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-64B (LT BU)	No Tool Required

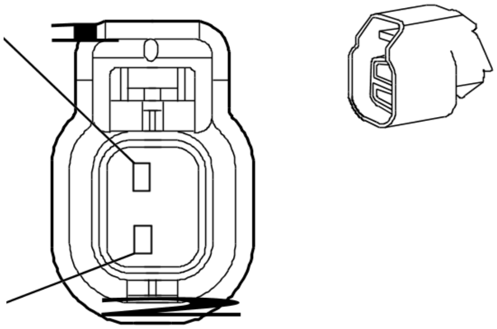
S146 Window/Outside Rearview Mirror Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	3380	Driver Window Main Control Down Switch Signal	II	—
2	0.35	YE / VT	3397	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	III	—
3	0.5	WH	3398	Passenger Outside Rearview Mirror Motor Common Control	III	—
4	0.35	GN / BK	3396	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	III	—
5	0.35	GN	3381	Window Switch Driver Express Signal	III	—
6	0.35	BN / BK	3389	Driver Outside Rearview Mirror Motor Right [+] Left [-] Control	III	—
7	0.35	VT / BU	3390	Driver Outside Rearview Mirror Motor Up [+] Down [-] Control	III	—
8	0.35	YE / BN	3391	Driver Mirror Motor Common Control	III	—
9	0.5	GN / YE	6134	Body Control Module LIN Bus 3	III	—
10	—	—	—	Not Occupied	—	—
11	0.5	GN / WH	3379	Window Switch Driver Up Signal	II	—
12	0.35	WH / GN	3412	Driver Outside Rearview Mirror Motor Fold Control	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	WH / VT	3270	Driver Door Lock Motor Status Signal	III	—
15	0.35	BU / VT	1124	Door Lock Key Switch Unlock Signal	III	—

S146 Window/Outside Rearview Mirror Switch - Driver (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
16	0.35	WH / YE	3395	Driver Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal	III	—
17	0.5	VT / RD	3392	Driver Outside Rearview Mirror Position Sensor 5V Reference	III	—
18	0.35	GY / BN	3394	Driver Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal	III	—
19	0.35	BK / BN	3393	Driver Outside Rearview Mirror Position Sensor Low Reference	III	—
20	—	—	—	Not Occupied	—	—
21	0.5	GN / WH	7530	Driver Seat Memory Control Module LIN Bus 1	III	—
22	0.35	GY / WH	3411	Driver Outside Rearview Mirror Motor Unfold Control	I	—
23	0.5	RD / VT	1940	Battery Positive Voltage	II	—
24	0.5	BK	1150	Ground	II	—

S148L Assist Step Kick Switch - Left (BRS)



1413014

Connector Part Information

Harness Type: Left Side Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

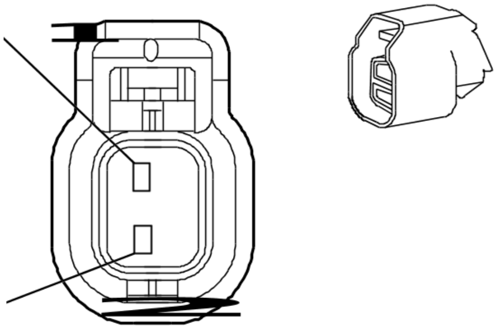
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S148L Assist Step Kick Switch - Left (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD	4746	Running Board Step Left Kick Switch Signal	I	—
2	—	BK	685	Running Board Step Kick Switch Feedback Signal	I	—

S148R Assist Step Kick Switch - Right (BRS)



1413014

Connector Part Information

Harness Type: Right Side Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way

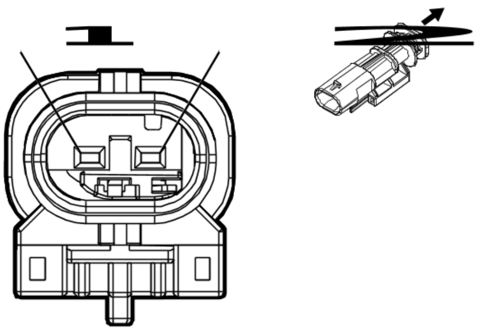
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S148R Assist Step Kick Switch - Right (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD	4747	Running Board Step Right Kick Switch Signal	I	—
2	—	BK	685	Running Board Step Kick Switch Feedback Signal	I	—

S157 Pickup Box Endgate Unlatch Switch (QT5)



Connector Part Information

Harness Type: Endgate
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series, Sealed(GY)

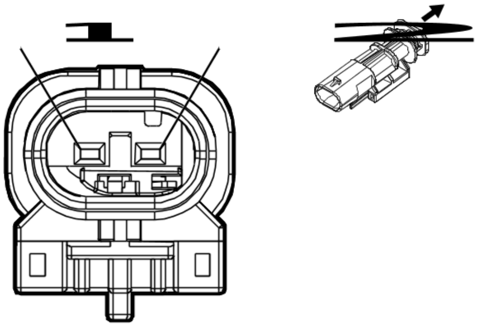
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

S157 Pickup Box Endgate Unlatch Switch (QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	7292	Major Endgate Release Switch Signal Exterior	I	—
2	0.75	BK	1450	Ground	I	—

S159E Pickup Box Endgate Control Switch - Exterior (QK1+QT5)



4994411

Connector Part Information

Harness Type: Endgate
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series, Sealed(GY)

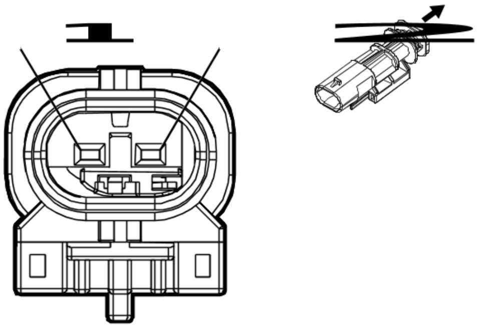
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

S159E Pickup Box Endgate Control Switch - Exterior (QK1+QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	1144	Endgate Release Switch Discrete Signal Exterior	I	—
2	0.75	BK	1450	Ground	I	—

S159E Pickup Box Endgate Control Switch - Exterior (QK2+QT5)



4994410

Connector Part Information

Harness Type: Endgate
OEM Connector: 35235497
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 MCON Series, Sealed(GY)

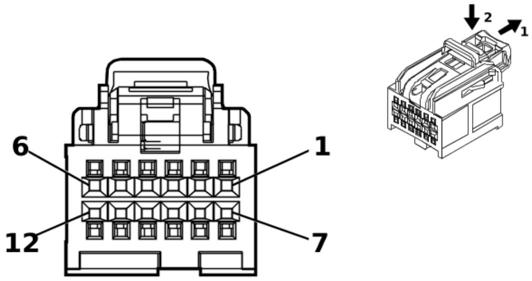
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (LT GN)	No Tool Required

S159E Pickup Box Endgate Control Switch - Exterior (QK2+QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	7294	Minor Endgate Release Switch Discrete Signal Exterior	I	—
2	0.75	BK	1450	Ground	I	—

S171L Instrument Panel Center Accessory Function Switch - Left



4975223

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016616
Service Connector: 13519750
Description: 12 <p01>-Way F 0.64 OCS Series(BK)

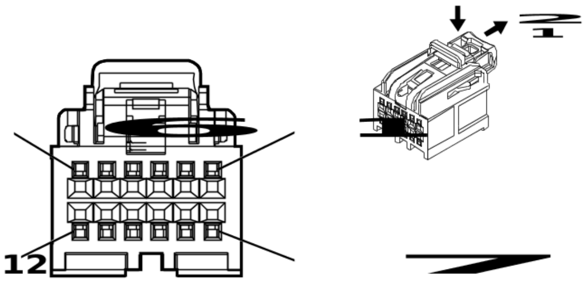
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300660	J-35616-64B (LT BU)	J-38125-12A

S171L Instrument Panel Center Accessory Function Switch - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / GN	2555	Rear Parking Assist Disable Signal	I	UD5/ UD7
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.5	BU / WH	3119	Roof Rail Air Bag Disable Switch Signal	I	C9I
4	0.35	GY / WH	3153	Lane Departure Warning Disable Switch Signal	I	UEU/ UHX
5	0.35	WH	3152	Lane Departure Warning Indicator Control	I	UEU/ UHX
6	0.35 0.35	BU / YE BU / YE	6844 7176	ABS/Traction Control Hill Descent Control Switch Signal All Windows Open Switch Signal	I I	JHD WLD
7	0.5	WH	6816	Indicator Dimming Control	I	—
8	0.35	GN / BN	5852	Rear Parking Assist Disable LED Signal	I	UD5/ UD7
9	0.5	BK	1050	Ground	I	—
10	0.5	BN / WH	3895	Roof Rail Air Bag Disable Switch Low Reference	I	C9I
11	0.35	GN	1110	Stop/Start Indicator Control	I	KL9
12	0.35	BU	1111	Stop/Start Switch Signal	I	KL9

S171R Instrument Panel Center Accessory Function Switch - Right



4997362

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016613
Service Connector: 13519752
Description: 12 <p01>-Way F 0.64 OCS Series(BN)

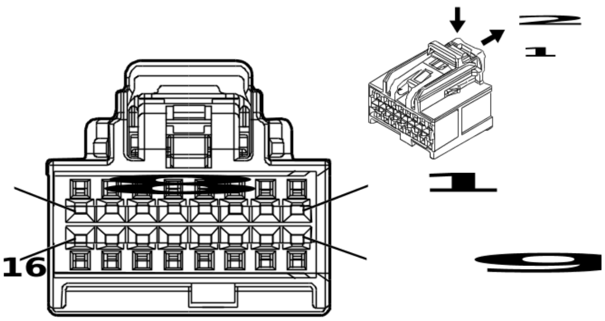
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300660	J-35616-64B (LT BU)	J-38125-12A

S171R Instrument Panel Center Accessory Function Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.35	GY / WH GY / WH	4630 7176	AC Power Outlet Switch Signal All Windows Open Switch Signal	I I	KI4/ KI5 WLD
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35 0.35	BU / YE BU / YE	6844 7176	ABS/Traction Control Hill Descent Control Switch Signal All Windows Open Switch Signal	I I	JHD+ URC WLD
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	GN	1110	Stop/Start Indicator Control	I	KL9
7	—	—	—	Not Occupied	—	—
8	0.5	BN / WH	7462	Running Board Steps Disable Signal	I	BRS
9	0.5	BK	1050	Ground	I	—
10	0.35	WH	6816	Indicator Dimming Control	I	—
11	0.35	YE	7755	AC Power Outlet Status Indicator Control	I	KI4/ KI5
12	0.35 0.35	BU BU / GY	1111 553	Stop/Start Switch Signal Shift Select Switch Performance Signal	I I	KL9+ URC - URC

S172 Auxiliary Multifunction Switch (9L7)



4873243

Connector Part Information

Harness Type: Upfitter
OEM Connector: 35016343
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way F 0.64 OCS Series(BK)

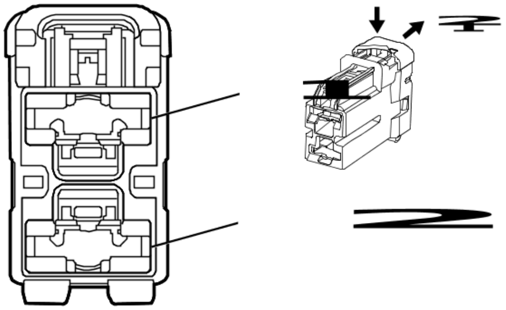
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

S172 Auxiliary Multifunction Switch (9L7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	WH	6816	Indicator Dimming Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	BK	961	—	I	—
7	0.35	BK	962	—	I	—
8	0.35	BK	963	—	I	—
9	0.35	BK	964	—	I	—
10	0.5	WH / BK	5990	Emergency Vehicle Roof Lamp Switch Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	BK	1050	Ground	I	—
13 - 16	—	—	—	Not Occupied	—	—

T1 Accessory DC/AC Power Inverter Module X1 (K14/K15)



2453116

Connector Part Information

Harness Type: Body
OEM Connector: 13581928
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 9.5 Series(BK)

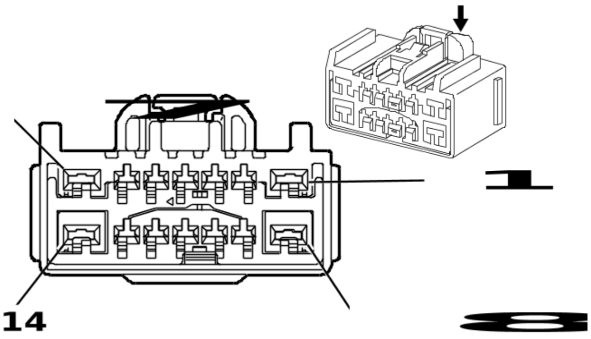
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-22 (RD)	No Tool Required

T1 Accessory DC/AC Power Inverter Module X1 (K14/K15)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BN / BK	4629	DC/AC Inverter Control	I	—
2	5	BK	1150	Ground	I	—

T1 Accessory DC/AC Power Inverter Module X2 (K14/K15)



1540775

Connector Part Information

Harness Type: Inverter Module Jumper
OEM Connector: 33356826
Service Connector: Service by Harness - See Part Catalog
Description: 14 <p01>-Way F 1.5, 2.8 YESC Series(BU)

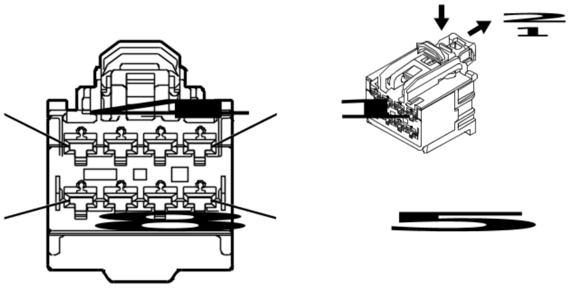
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

T1 Accessory DC/AC Power Inverter Module X2 (K14/K15)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	5683	120V AC Phase A	II	—
2	—	—	—	Not Occupied	—	—
3	0.35	VT / YE	5985	Accessory Wake-Up Serial Data	I	—
4	0.35	WH / GN	4628	DC/AC Inverter Relay Control	I	—
5	0.35	BU / BN	6807	DC/AC Inverter Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	BK / WH	2264	120V AC Phase A 2	II	—
8	0.75	RD	5684	120V AC Phase B	II	—
9	0.35	Bare	514	Low Reference	I	—
10	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	GN / BN	2266	DC/AC Inverter Control 2	I	—
13	0.35	Bare	2257	Low Reference	I	—
14	0.75	RD / WH	2265	120V AC Phase B 2	II	—

T3 Audio Amplifier X1 (UQA)



4875738

Connector Part Information

Harness Type: Body
OEM Connector: 33223792
Service Connector: 19369366
Description: 8 <p01>-Way F 2.8 OCS Series(BK)

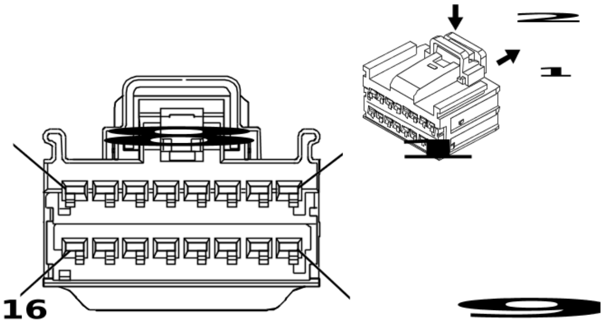
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

T3 Audio Amplifier X1 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BU / GY	346	Left/Rear Subwoofer [+] Control	I	—
2	0.75	YE	200	Right Front Speaker 1 [+] Control	I	—
3	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—
4	2.5	RD / YE	3740	Battery Positive Voltage	I	—
5	2.5	GN / BK	1794	Left/Rear Subwoofer [-] Control	I	—
6	0.75	YE / BK	117	Right Front Speaker [-] Control 1	I	—
7	0.75	BN / BU	118	Left Front Speaker [-] Control 1	I	—
8	2.5	BK / WH	2751	Signal Ground	I	—

T3 Audio Amplifier X2 (UQA)



4332214

Connector Part Information

Harness Type: Body
OEM Connector: 15512506
Service Connector: 13591061
Description: 16 <p01>-Way F 1.5 OCS Series(BK)

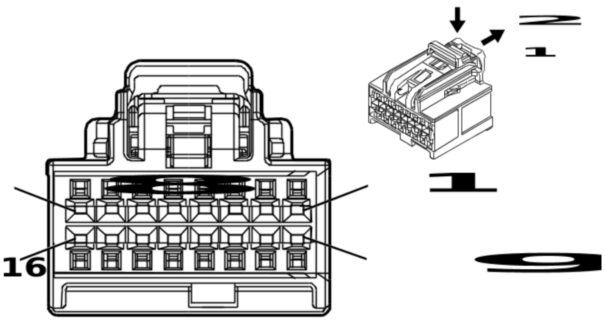
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84757974	J-35616-2A (GY)	J-38125-215A

T3 Audio Amplifier X2 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	BN / BK	1953	Right Front Midrange Speaker [-] Control	I	—
3	0.75	BU / VT	1857	Left Front Midrange Speaker [+] Control	I	—
4	0.5	WH	46	Right Rear Speaker [+] Control	I	—
5	0.5	GN	199	Left Rear Speaker [+] Control	I	—
6 - 9	—	—	—	Not Occupied	—	—
10	0.75	WH / YE	1853	Right Front Midrange Speaker [+] Control	I	—
11	0.75	BU / BN	1957	Left Front Midrange Speaker [-] Control	I	—
12	0.5	BU / BK	115	Right Rear Speaker [-] Control	I	—
13	0.5	GN / BK	116	Left Rear Speaker [-] Control	I	—
14 - 16	—	—	—	Not Occupied	—	—

T3 Audio Amplifier X3 (UQA)



4873243

Connector Part Information

Harness Type: Body
OEM Connector: 35016343
Service Connector: 13519738
Description: 16 <p01>-Way F 0.64 OCS Series(BK)

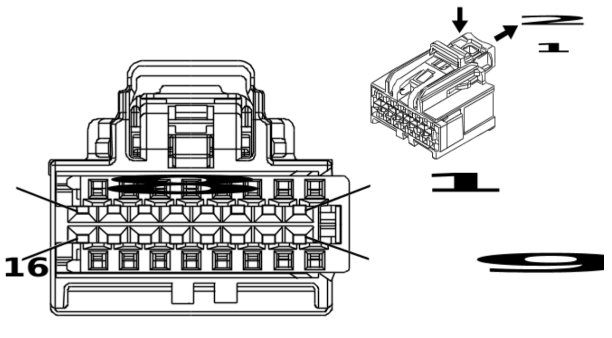
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354230	J-35616-64B (LT BU)	J-38125-215A

T3 Audio Amplifier X3 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / GN	1102	Low Speed GMLAN Serial Data 2	I	—
2 - 16	—	—	—	Not Occupied	—	—

T3 Audio Amplifier X4 (UQA)



4256181

Connector Part Information

Harness Type: Body
OEM Connector: 35016345
Service Connector: 13519740
Description: 16 <p01>-Way F 0.64 OCS Series(BN)

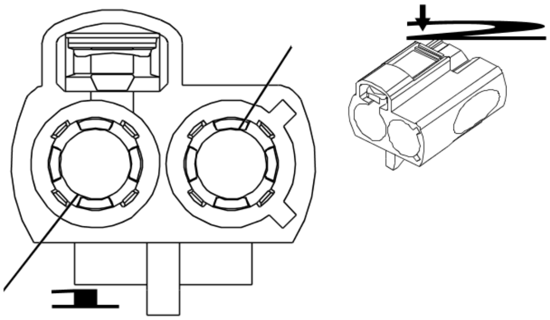
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84619127	J-35616-64B (LT BU)	J-38125-12A

T3 Audio Amplifier X4 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	GY / BK	7215	Ethernet Bus 6 [+]	I	—
4	0.35	BN / BK	7214	Ethernet Bus 6 [-]	I	—
5 - 16	—	—	—	Not Occupied	—	—

T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)



3418133

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13583911
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2 <p01>-Way F Coax Type(PU)

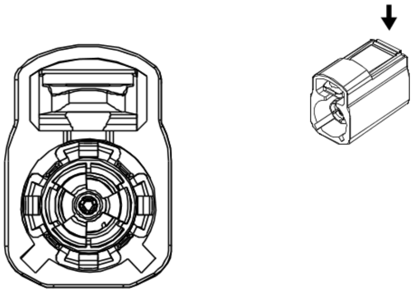
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	—	—	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	—

T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)



Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13581700
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type

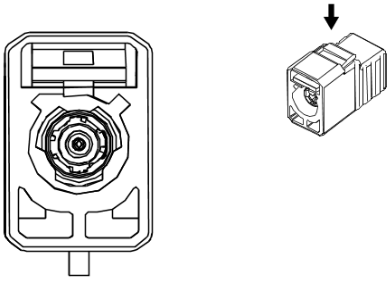
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(XM +/-HD) Coaxial Antenna XM Signal	I	—

T4M Radio Antenna



Connector Part Information

Harness Type: Radio Antenna COAX
OEM Connector: 13581687
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

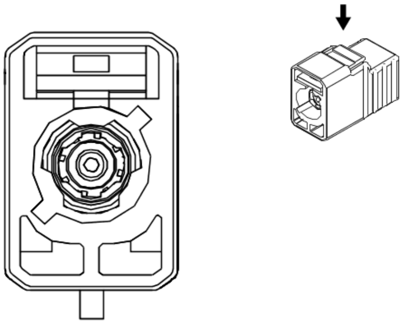
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

T4M Radio Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(AM/FM) Antenna RF Signal	I	—

T4P Navigation Antenna ((IOS/IOT)-UE1)



Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13581690
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BU)

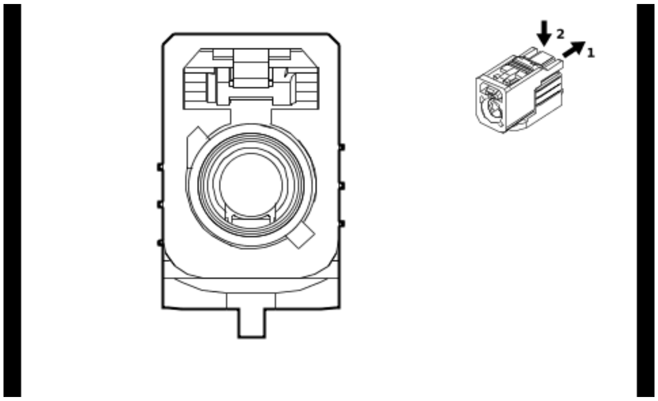
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

T4P Navigation Antenna ((IOS/IOT)-UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(GPS only) Coaxial Antenna GPS Signal	I	—

T4T Wireless Communication Antenna - WLAN (IOS/IOT)



5518436

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13516416
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BG)

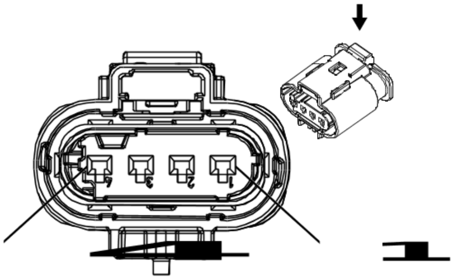
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

T4T Wireless Communication Antenna - WLAN (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	WiFi Antenna Coaxial Signal	I	—

T8A Ignition Coil 1 (L3B)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

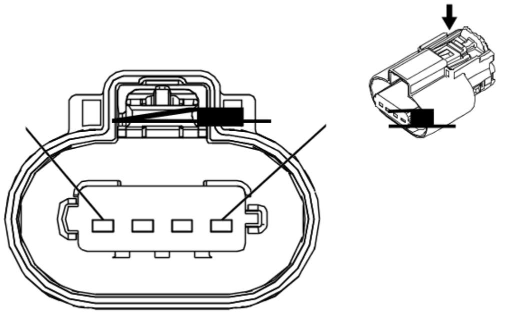
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T8A Ignition Coil 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU / VT	2121	Ignition Control 1	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—

T8A Ignition Coil 1 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

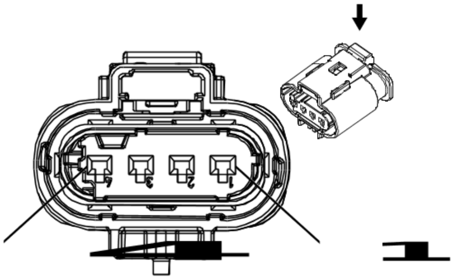
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8A Ignition Coil 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.75	BK BK	4550 4450	Ground Ground	II II	L82/ L84/ L87 LV3
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU / VT	2121	Ignition Control 1	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—

T8B Ignition Coil 2 (L3B)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

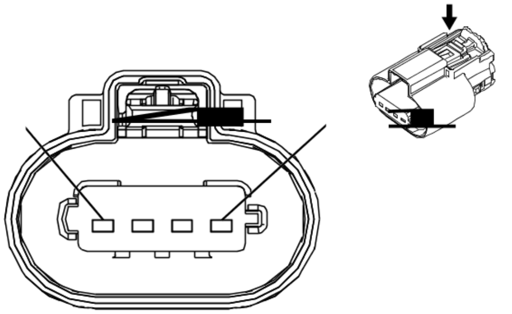
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T8B Ignition Coil 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU / WH	2122	Ignition Control 2	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—

T8B Ignition Coil 2 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

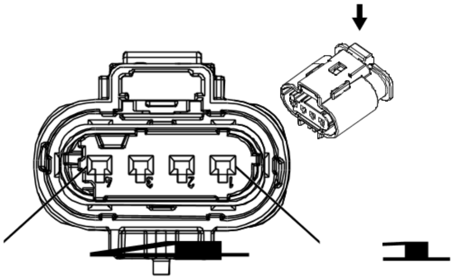
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8B Ignition Coil 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	II	LV3
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BU / WH	2122	Ignition Control 2	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—

T8C Ignition Coil 3 (L3B)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

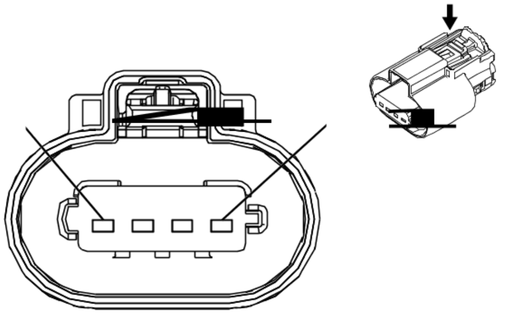
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T8C Ignition Coil 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN / BU	2123	Ignition Control 3	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—

T8C Ignition Coil 3 (L82/L84/L87/LV3)



Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

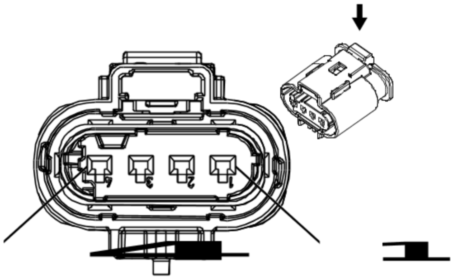
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8C Ignition Coil 3 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4450	Ground	II	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN / BU	2123	Ignition Control 3	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—

T8D Ignition Coil 4 (L3B)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

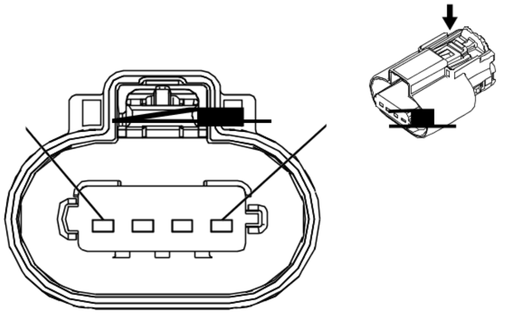
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T8D Ignition Coil 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	YE / BU	2124	Ignition Control 4	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—

T8D Ignition Coil 4 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

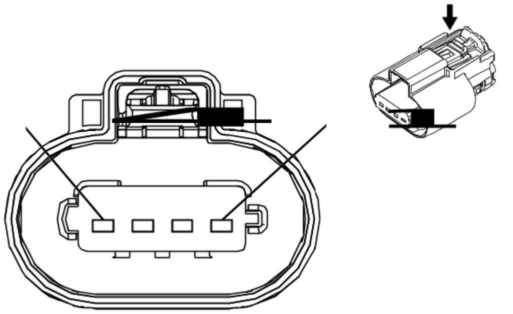
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8D Ignition Coil 4 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4450	Ground	II	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	YE / BU	2124	Ignition Control 4	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—

T8E Ignition Coil 5 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

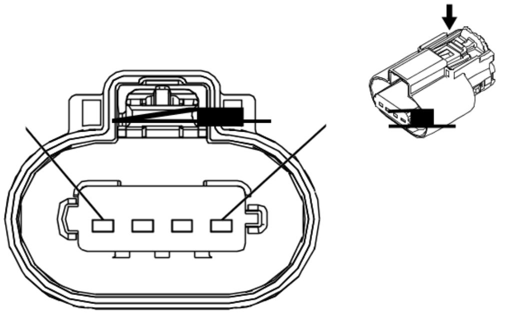
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8E Ignition Coil 5 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4450	Ground	II	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU / GY	2125	Ignition Control 5	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—

T8F Ignition Coil 6 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

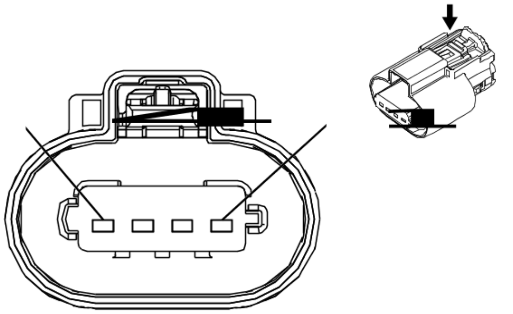
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8F Ignition Coil 6 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	4450	Ground	I	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BN / BU	2126	Ignition Control 6	I	—
4	0.75 0.5	VT / BU VT / BU	5292 5292	Powertrain Main Relay Fused Supply Voltage 3 Powertrain Main Relay Fused Supply Voltage 3	II I	L82/ L84/ L87 LV3

T8G Ignition Coil 7 (L82/L84/L87)


3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

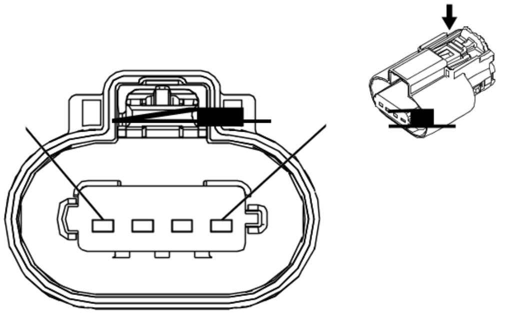
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8G Ignition Coil 7 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	II	—
2	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN / GY	2127	Ignition Control 7	I	—
4	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—

T8H Ignition Coil 8 (L82/L84/L87)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 34770-0402
Service Connector: 19367596
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

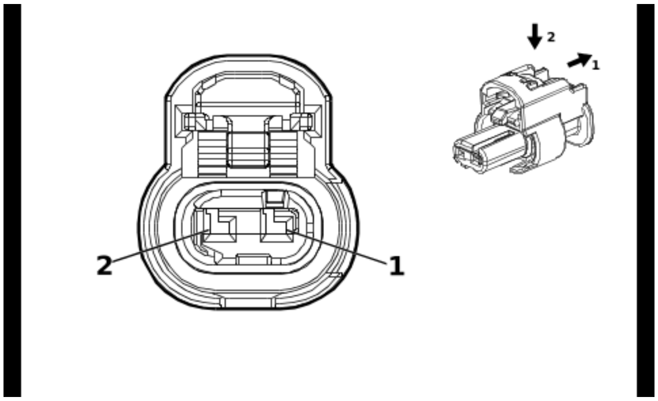
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

T8H Ignition Coil 8 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	II	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	VT / WH	2128	Ignition Control 8	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—

T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)



4649903

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 1-2296694-1
Service Connector: 19366858
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

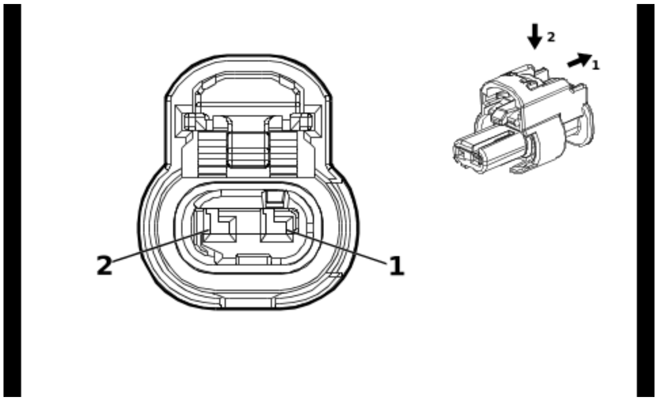
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / BK	3552	Interior Passive Entry Antenna 1 High Signal	I	—
2	0.5	WH	3553	Interior Passive Entry Antenna 1 Low Signal	I	—

T10E Keyless Entry Antenna - Rear Compartment



4649903

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296694-1
Service Connector: 19366858
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

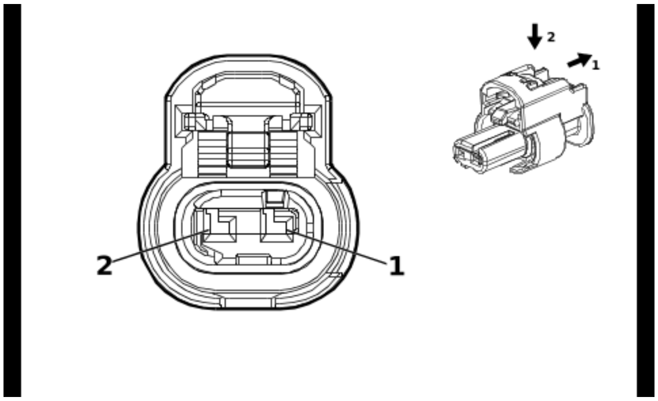
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T10E Keyless Entry Antenna - Rear Compartment

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	3568	Rear Closure Passive Entry Antenna High Signal	I	—
2	0.5	GN / GY	3569	Rear Closure Passive Entry Antenna Low Signal	I	—

T10J Keyless Entry Antenna - Center Console Front (BTM+D07)



4649903

Connector Part Information

Harness Type: Floor Console
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

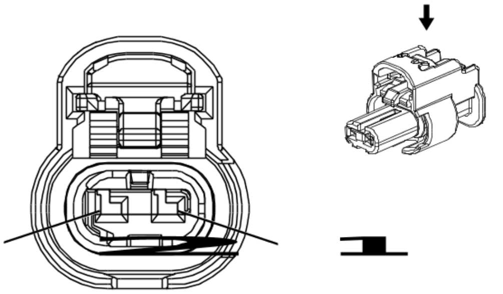
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T10J Keyless Entry Antenna - Center Console Front (BTM+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3554	Interior Passive Entry Antenna 2 High Signal	I	—
2	0.5	GY / BK	3555	Interior Passive Entry Antenna 2 Low Signal	I	—

T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)



4335931

Connector Part Information

Harness Type: Front Center Seat
OEM Connector: 1-2296694-2
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

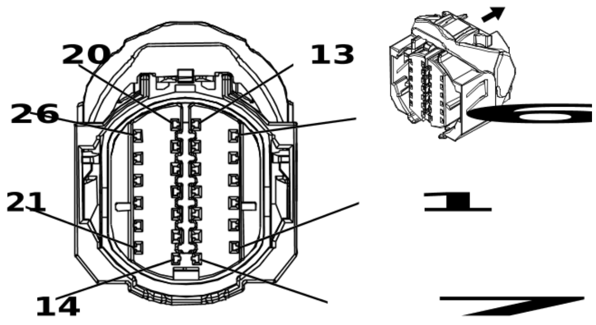
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required

T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3554	Interior Passive Entry Antenna 2 High Signal	I	—
2	0.5	GY / BK	3555	Interior Passive Entry Antenna 2 Low Signal	I	—

T12 Automatic Transmission Assembly X1 (MQB)



4420489

Connector Part Information

Harness Type: Engine
OEM Connector: 2203973-1
Service Connector: 13596549
Description: 26 <p01>-Way F 1.2 MCON-CB Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19331733	J-35616-16 (LT GN)	J-38125-215A
II	84963773	J-35616-16 (LT GN)	J-38125-215A

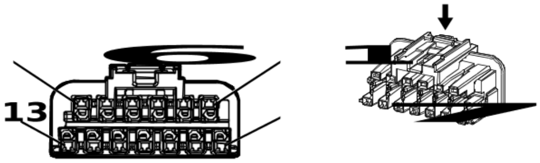
T12 Automatic Transmission Assembly X1 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	6353	Input Speed Signal	I	—
2	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	I	—
3	0.5	BN / WH	6254	Transmission Input Speed Sensor Signal	I	—
4	0.5	GY / BU	6358	Output Speed Signal	I	—
5	0.5	GN / YE	5724	Ignition Mode Switch Mode Control	I	—
6	0.5	WH / BU	5726	Ignition Mode Switch Mode Control Backup	I	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—
9	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—
10	0.75	RD / VT	7940	Battery Positive Voltage	I	—
11	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	I	—
12	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
13	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	I	—
14	0.5	YE / BN	6404	Clutch Solenoid Valve E Control	I	—
15	0.5	GY / GN	6403	Clutch Solenoid Valve D Control	I	—
16	0.5	GY	6402	Clutch Solenoid Valve C Control	I	—
17	1.5	BK	4450	Ground	II	—
18	0.5	GN / WH	2968	Transmission Auxiliary Fluid Pump Control	I	—
19	0.5	GN / BK	7819	Default Disable Solenoid Control	I	—

T12 Automatic Transmission Assembly X1 (MQB) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
21	0.5	VT	4509	Transmission Clutch F Control	I	—
22	0.5	WH / BU	4507	Transmission Clutch H Control	I	—
23	0.5	WH	4508	Transmission Clutch G Control	I	—
24	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	I	—
25	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	I	—
26	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	I	—

T12 Automatic Transmission Assembly X2 (MQB)



4757907

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2203990-1
Service Connector: Service by Harness - See Part Catalog
Description: 13 <p01>-Way F 1.2 MCON Series(BN)

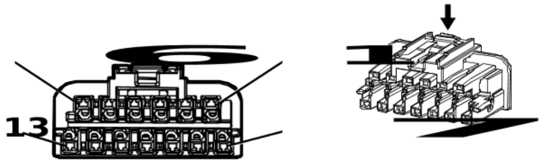
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

T12 Automatic Transmission Assembly X2 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GY	5726	Ignition Mode Switch Mode Control Backup	I	—
2	0.5	YE	5724	Ignition Mode Switch Mode Control	I	—
3	0.5	YE / OG	6358	Output Speed Signal	I	—
4	0.5	WH / BU	4510	Transmission Intermediate Speed Signal	I	—
5	0.5	VT / GN	4510	Transmission Intermediate Speed Signal	I	—
6	0.5	WH / VT	6353	Input Speed Signal	I	—
7	0.5	BN / YE	585	Transmission Fluid Temperature Sensor Signal	I	—
8	0.5	OG	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
9	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
10	0.5	GN / VT	8640	Battery Positive Voltage	I	—
11	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
12	0.5	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—
13	0.5	GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—

T12 Automatic Transmission Assembly X3 (MQB)



4757999

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2203990-2
Service Connector: Service by Harness - See Part Catalog
Description: 13 <p01>-Way F 1.2 MCON Series(BN)

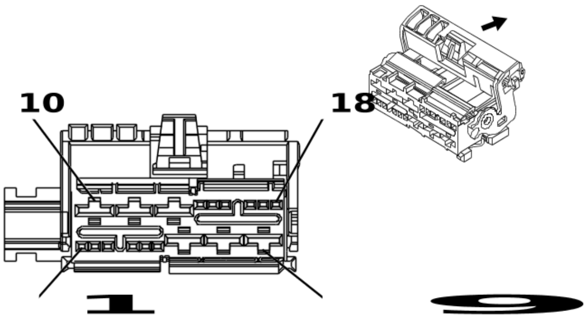
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

T12 Automatic Transmission Assembly X3 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	4509	Transmission Clutch F Control	I	—
2	0.5	YE / VT	4507	Transmission Clutch H Control	I	—
3	0.5	BU / GY	4508	Transmission Clutch G Control	I	—
4	0.5	GN / OG	1530	Transmission Line Pressure Control Solenoid Valve Control	I	—
5	0.5	GY / BN	422	Torque Converter Clutch Solenoid Valve Control	I	—
6	0.5	BU / BN	586	Transmission Fluid Temperature Sensor Low Reference	I	—
7	0.5	BU / GN	6404	Clutch Solenoid Valve E Control	I	—
8	0.5	GN / BN	6403	Clutch Solenoid Valve D Control	I	—
9	0.5	GY	6402	Clutch Solenoid Valve C Control	I	—
10	0.5	BK / YE	4450	Ground	I	—
11	0.5	GY / OG	2968	Transmission Auxiliary Fluid Pump Control	I	—
12	0.5	VT	7819	Default Disable Solenoid Control	I	—
13	0.5	BK / GY	3927	Transmission Internal Mode Switch Feedback Signal	I	—

T19 Power Supply Transformer (KL9)



3825662

Connector Part Information

Harness Type: Body
OEM Connector: 15534193
Service Connector: 84789277
Description: 18 <p01>-Way F 0.64 MTS, 6.3 MCP Series(BK)

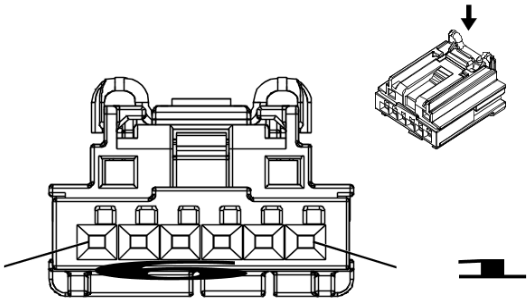
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (LT BU)	J-38125-215A
II	19367600	J-35616-40 (BU)	J-38125-556

T19 Power Supply Transformer (KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.35	VT / YE	5985	Accessory Wake-Up Serial Data	I	—
5	0.5	YE / BK	625	Starter Enable Relay Control	I	—
6	0.5	VT / GN	1739	Run/Crank Ignition 1 Voltage	I	—
7	2.5	BK	1250	Ground	II	—
8	2.5	RD / YE	8140	Battery Positive Voltage	II	—
9	2.5	RD / GN	2173	12V Regulated Supply Voltage 2	II	—
10	2.5	RD / YE	2172	12V Regulated Supply Voltage 1	II	—
11	2.5	RD / WH	8040	Battery Positive Voltage	II	—
12	2.5	BK	1150	Ground	II	—
13	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	I	—
14	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	I	—
15	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	I	—
16	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	I	—
17	0.5	WH	7494	High Speed GMLAN Serial Data [-] 3	I	—
18	0.5	BU / BK	7493	High Speed GMLAN Serial Data [+] 3	I	—

T22 Mobile Device Wireless Charger Module (K4C)



3960313

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Generation Y Series(BK)

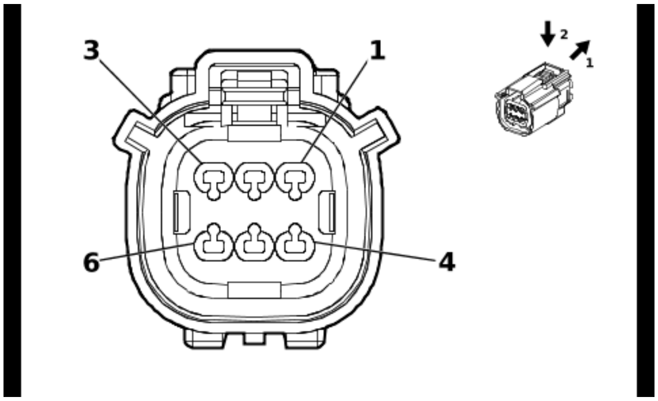
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

T22 Mobile Device Wireless Charger Module (K4C)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	4601	Retained Accessory Power Control	I	—
2	0.5	BK	1250	Ground	I	—
3	0.35	GN	4512	Wireless Charging System Charge Indicator Control	I	—
4	0.5	BN	4511	Wireless Charging System Fault Indicator Control	I	—
5 - 6	—	—	—	Not Occupied	—	—

X80C Accessory Power Receptacle - Cargo (BOP)



5666225

Connector Part Information

Harness Type: Power Inverter Module Jumper
OEM Connector: 35081273
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5 MX Series, Sealed(BK)

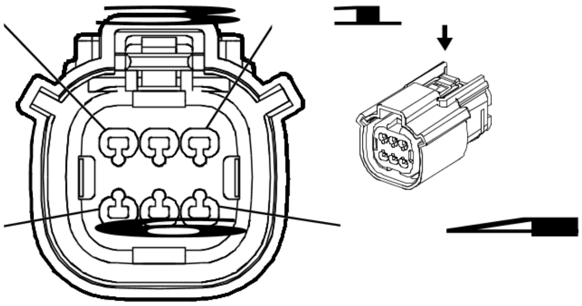
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

X80C Accessory Power Receptacle - Cargo (BOP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	7754	AC Power Outlet Enable Signal	I	—
2	0.75	GN / BN	2266	DC/AC Inverter Control 2	II	—
4	0.75	BK / WH	2264	120V AC Phase A 2	II	—
5	1	BK	6650	Ground	II	—
6	0.75	RD / WH	2265	120V AC Phase B 2	II	—

X80C Accessory Power Receptacle - Cargo (KC9/KCA)



1986157

Connector Part Information

Harness Type: Power Inverter Module Jumper
OEM Connector: 15533832
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5 MX Series, Sealed(BK)

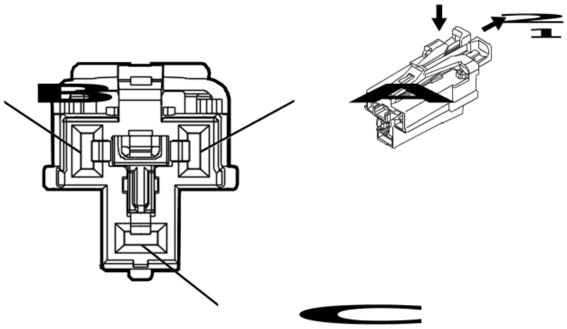
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

X80C Accessory Power Receptacle - Cargo (KC9/KCA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	7754	AC Power Outlet Enable Signal	I	—
2	0.75	GN / BN	2266	DC/AC Inverter Control 2	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	BK / WH	2264	120V AC Phase A 2	I	—
5	1	BK	6650	Ground	I	—
6	0.75	RD / WH	2265	120V AC Phase B 2	I	—

X80G Accessory Power Receptacle - Instrument Panel



4872413

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33386302
Service Connector: 19369281
Description: 3 <p01>-Way F 2.8 APEX Series(GY)

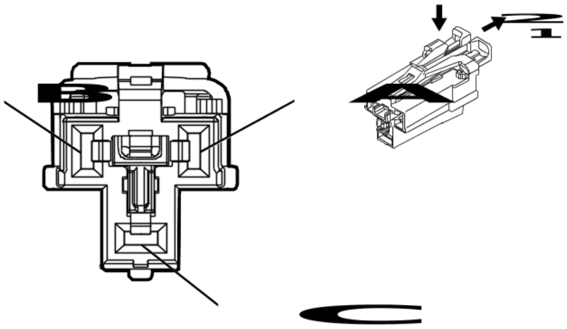
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

X80G Accessory Power Receptacle - Instrument Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	RD / BN	4240	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1.5	BK	1050	Ground	I	—

X80L Accessory Power Receptacle - Center Console Rear (A50/D07)



4872413

Connector Part Information

Harness Type: Floor Console
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 2.8 APEX Series(GY)

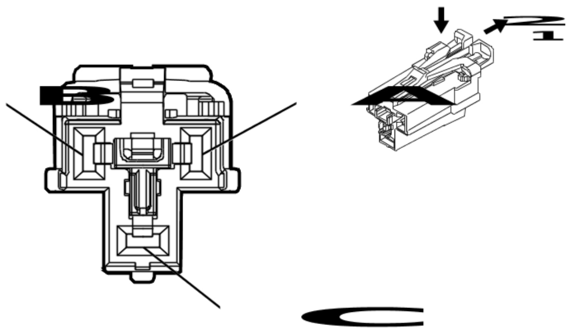
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

X80L Accessory Power Receptacle - Center Console Rear (A50/D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	RD / WH	1040	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1.5	BK	1250	Ground	I	—

X80M Accessory Power Receptacle - Rear Seat



4872413

Connector Part Information

Harness Type: Front Center Seat
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 2.8 APEX Series(GY)

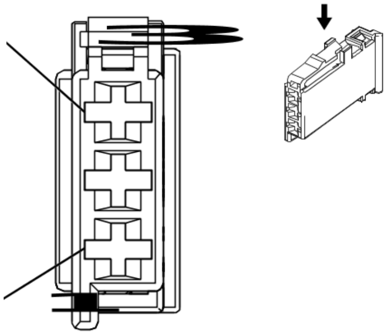
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

X80M Accessory Power Receptacle - Rear Seat

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	RD / WH	1040	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1.5	BK	1250	Ground	I	—

X81 Accessory Power Receptacle - 110V AC X1 (K14)



2039656

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 1452142-1
Service Connector: 93186706
Description: 3 <p01>-Way F 1.6 Micro-Timer Series(BK)

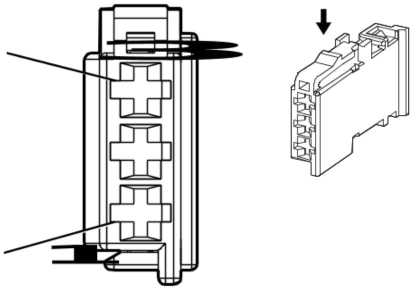
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81 Accessory Power Receptacle - 110V AC X1 (K14)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	7754	AC Power Outlet Enable Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK	5683	120V AC Phase A	I	—

X81 Accessory Power Receptacle - 110V AC X2 (K14)



2236412

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 0-1452142-2
Service Connector: 19367740
Description: 3 <p01>-Way F 1.6 Timer Series(GY)

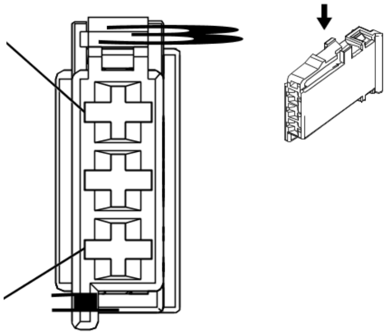
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81 Accessory Power Receptacle - 110V AC X2 (K14)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BN	6807	DC/AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	RD	5684	120V AC Phase B	I	—

X81B Accessory Power Receptacle - 220V AC X1 (K15)



2039656

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3 <p01>-Way F 1.6 Micro-Timer Series(BK)

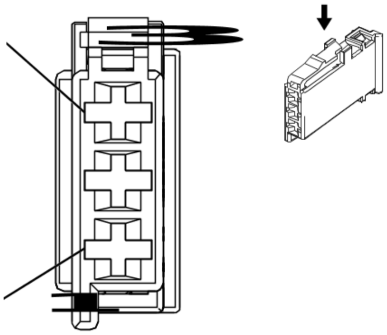
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81B Accessory Power Receptacle - 220V AC X1 (K15)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	7754	AC Power Outlet Enable Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK	5683	120V AC Phase A	I	—

X81B Accessory Power Receptacle - 220V AC X1 (KI5)



2039656

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3 <p01>-Way F 1.6 Micro-Timer Series(BK)

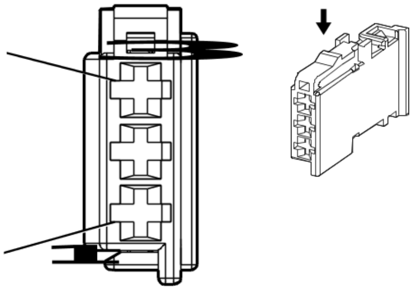
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81B Accessory Power Receptacle - 220V AC X1 (KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	7754	AC Power Outlet Enable Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK	5683	120V AC Phase A	I	—

X81B Accessory Power Receptacle - 220V AC X2 (K15)



2236412

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 19367740
Description: 3 <p01>-Way F 1.6 Timer Series, Sealed(GY)

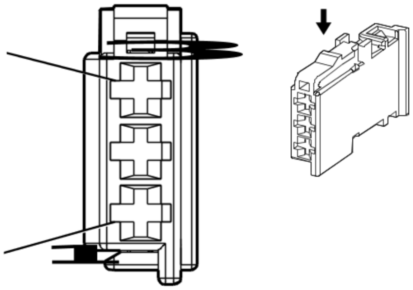
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81B Accessory Power Receptacle - 220V AC X2 (K15)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BN	6807	DC/AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	RD	5684	120V AC Phase B	I	—

X81B Accessory Power Receptacle - 220V AC X2 (KI5)



2236412

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 19367740
Description: 3 <p01>-Way F 1.6 Timer Series, Sealed(GY)

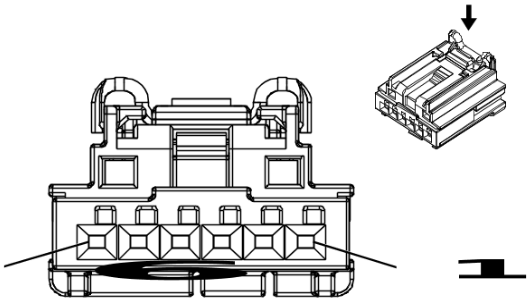
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81B Accessory Power Receptacle - 220V AC X2 (KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BN	6807	DC/AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	RD	5684	120V AC Phase B	I	—

X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)



3960313

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Generation Y Series(BK)

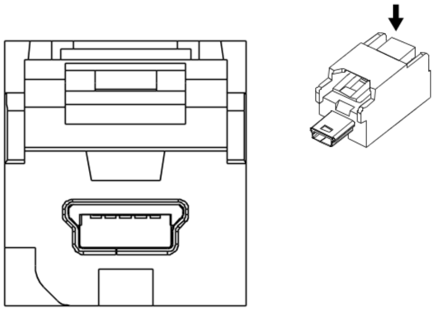
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	1340	Battery Positive Voltage	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.5	BK / WH	2751	Signal Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)



3214018

Connector Part Information

Harness Type: Floor Console USB
OEM Connector: 13584747
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(GY)

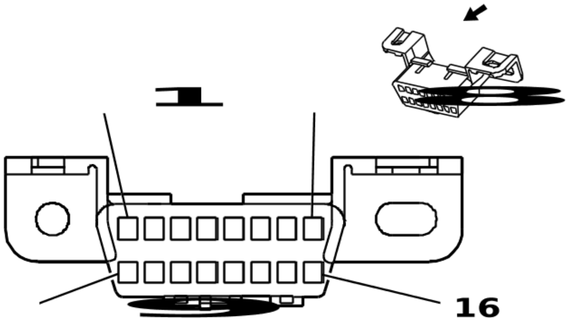
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X84 Data Link Connector



68793

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12110250
Service Connector: 12110250
Description: 16 <p01>-Way F 150 Metri-Pack Series(BK)

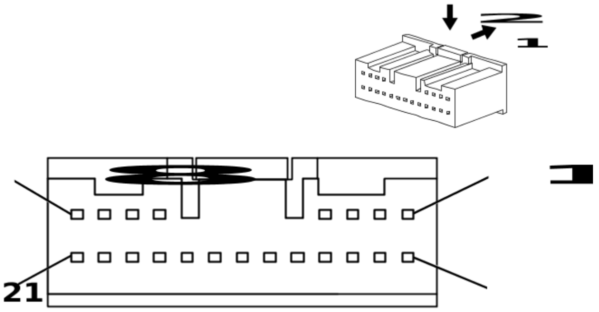
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580059	J-35616-14 (GN)	J-38125-12A

X84 Data Link Connector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / WH	2100	Low Speed GMLAN Serial Data 3	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BU / WH	2089	High Speed GMLAN Serial Data [+] 13	I	—
4	0.5	BK	1850	Ground	I	—
5	0.5	BK / WH	1851	Signal Ground	I	—
6	0.35	BU / BK	1978	High Speed GMLAN Serial Data [+] 11	I	—
7 - 10	—	—	—	Not Occupied	—	—
11	0.35	WH	2090	High Speed GMLAN Serial Data [-] 13	I	—
12	0.35	BU / BN	1980	High Speed GMLAN Serial Data [+] 12	I	—
13	0.35	WH	1981	High Speed GMLAN Serial Data [-] 12	I	—
14	0.35	WH	1979	High Speed GMLAN Serial Data [-] 11	I	—
15	—	—	—	Not Occupied	—	—
16	0.5	RD / WH	640	Battery Positive Voltage	I	—

X85 Steering Wheel Air Bag Coil X1



3960237

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: ATLCPB-21B-2AY
Service Connector: 13510218
Description: 21 <p01>-Way F 0.64 Series(YE)

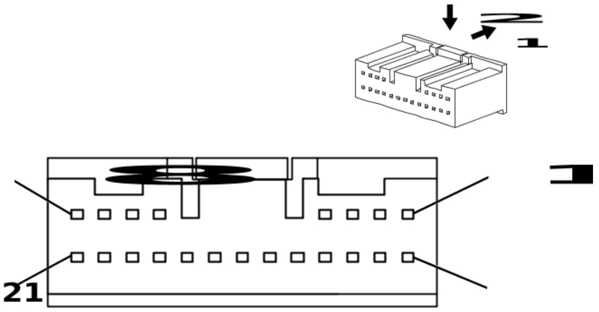
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575742	J-35616-64B (LT BU)	J-38125-215A

X85 Steering Wheel Air Bag Coil X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / WH	1851	Signal Ground	I	—
2	0.35	GN / WH	3287	Horn Switch Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	OG / GN	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
6	0.35	WH / OG	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—
7	0.35	BN / OG	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
8	0.35	OG / VT	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
9	0.35	GN / BK	3894	Instrument Cluster LIN Bus 1	I	—
10	0.35	GN / BU	4119	HVAC Control Module LIN Bus 2	I	—
11	0.35	BN / GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
12	0.35	WH / RD	1444	12V Reference	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	RD / YE	3040	Battery Positive Voltage	I	—
15	0.35	GY / GN	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
16	—	—	—	Not Occupied	—	—
17	0.5	YE	6817	LED Backlight Dimming Control 1	I	—
18 - 19	—	—	—	Not Occupied	—	—
20	0.5	BK	1850	Ground	I	—
21	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—

X85 Steering Wheel Air Bag Coil X2



3960237

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13510218
Service Connector: Service by Harness - See Part Catalog
Description: 21 <p01>-Way F 0.64 Series(YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

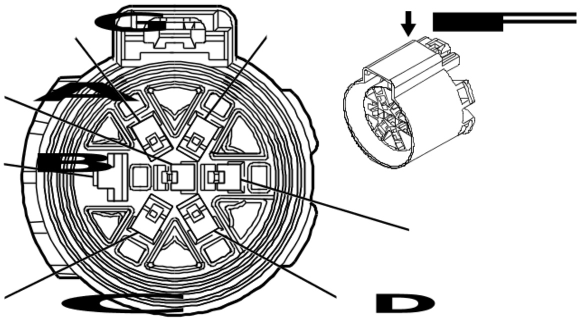
X85 Steering Wheel Air Bag Coil X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	— —	BK BK	1850 1850	Ground Ground	I	— —
2	—	RD	3287	Horn Switch Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	—	GY / OG	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
6	—	OG / VT	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—
7	—	OG / WH	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
8	—	YE / OG	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
9	—	OG	1139	Run/Crank Ignition 1 Voltage	I	—
10	—	BK	1850	Ground	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	—	YE	6817	LED Backlight Dimming Control 1	I	—
14	—	—	—	Not Occupied	—	—
15	—	VT	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
16	— —	GN GN	3040 3040	Battery Positive Voltage Battery Positive Voltage	I	— —
17	—	—	—	Not Occupied	—	—
18	—	BU	1444	12V Reference	I	—
19	—	GN / OG	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—

X85 Steering Wheel Air Bag Coil X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	—	WH	4119	HVAC Control Module LIN Bus 2	I	—
21	— —	BK / BU BK / BU	3894 3894	Instrument Cluster LIN Bus 1 Instrument Cluster LIN Bus 1	I	— —

X88 Trailer Connector X1 (U1D)



2056936

Connector Part Information

Harness Type: Back Up Alarm
OEM Connector: 13857223
Service Connector: Service by Harness - See Part Catalog
Description: 7 <p01>-Way F 280, 630 Metri-Pack Series, Sealed(BK)

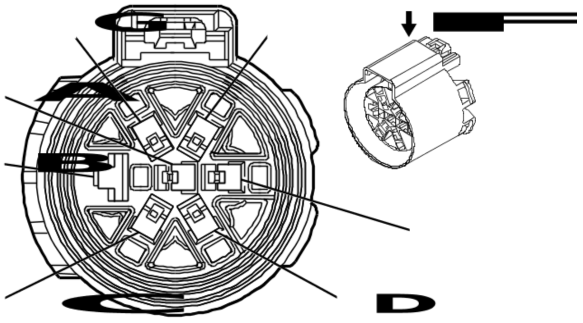
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

X88 Trailer Connector X1 (U1D)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	GN	1624	Trailer Backup Lamp Control	II	—
B	5	WH	22	Trailer Ground	I	—
C	3	BU	47	Trailer Auxiliary Control	II	—
D	0.8	GN	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
E	3	RD / BK	742	Battery Positive Voltage	II	—
F	1	BN	2109	Trailer Park Lamp Control	II	—
G	0.8	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	II	—

X88 Trailer Connector X1 (UY2/Z6A)



2056936

Connector Part Information

Harness Type: Chassis
OEM Connector: 13857223
Service Connector: 15306164
Description: 7 <p01>-Way F 280, 630 Metri-Pack Series, Sealed(BK)

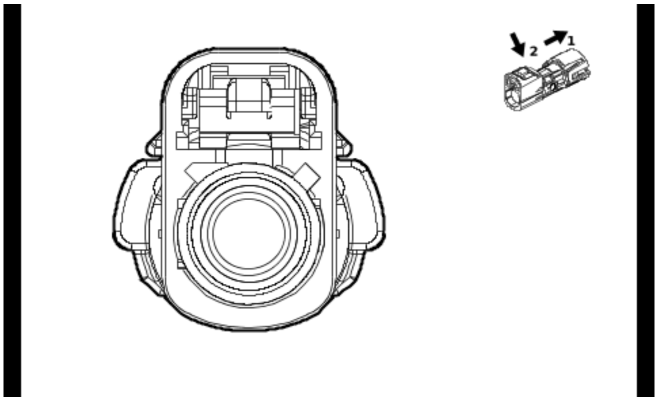
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

X88 Trailer Connector X1 (UY2/Z6A)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75 0.75	WH / GN GN / WH	1624 5189	Trailer Backup Lamp Control Trailer Backup Lamp Control	II II	(Z82/ 8S3) - U1D U1D
B	5	WH	22	Trailer Ground	I	—
C	2.5	BU	47	Trailer Auxiliary Control	II	—
D	0.75	GN / VT	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
E	4	RD / GN	742	Battery Positive Voltage	II	—
F	1.5	GY / BN	2109	Trailer Park Lamp Control	II	—
G	0.75 0.75	YE / BU YE / GY	318 1618	Left Rear Trailer Stop/Turn Lamp Control Left Rear Trailer Stop/Turn Lamp Control	II II	(Z82/ 8S3) - U1D U1D

X88 Trailer Connector X2 (UVI/UVS)



5758030

Connector Part Information

Harness Type: Chassis Coax
OEM Connector: 13529782
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(BK)

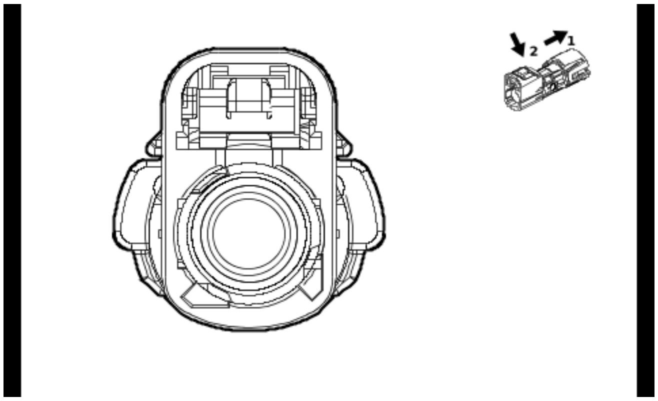
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X88 Trailer Connector X2 (UVI/UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Trailer Rear Vision Camera Coaxial Video Signal	I	—

X88 Trailer Connector X3 (UVS)



5757455

Connector Part Information

Harness Type: Chassis Coax
OEM Connector: 13529793
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type(OG)

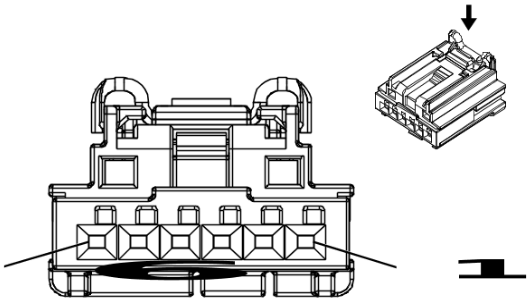
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X88 Trailer Connector X3 (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Trailer 2 Rear Vision Camera Coaxial Video Signal	I	—

X92 USB Receptacle X1



3960313

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2035363-4
Service Connector: 19332786
Description: 6 <p01>-Way F 0.64 Generation Y Series(BK)

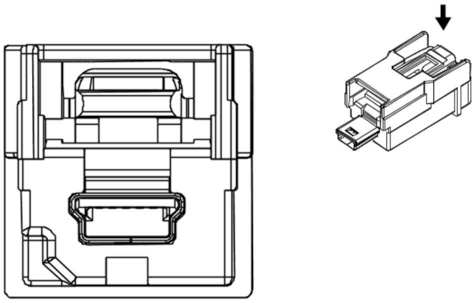
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

X92 USB Receptacle X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / WH	1340	Battery Positive Voltage	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	BK / WH	2751	Signal Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

X92 USB Receptacle X2



2807491

Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 13581313
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(GY)

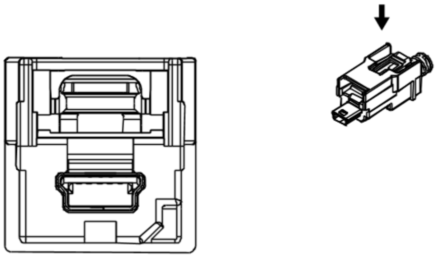
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X92 USB Receptacle X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X92 USB Receptacle X3 (D07+(IOS/IOT))



2807425

Connector Part Information

Harness Type: USB Receptacle Jumper USB
OEM Connector: 111014-9000
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5 <p01>-Way M 2.0 Mini-B USB Type(BK)

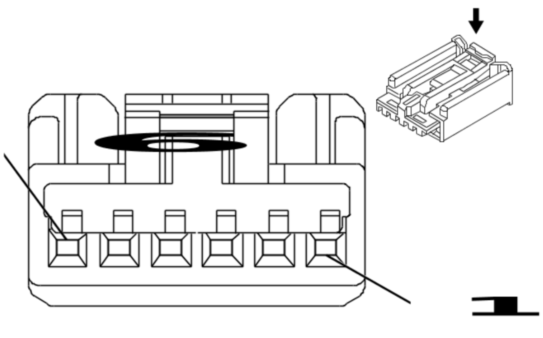
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X92 USB Receptacle X3 (D07+(IOS/IOT))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)



1862240

Connector Part Information

Harness Type: Front Center Seat
OEM Connector: AIT2PB-06-1AK
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Kaizen Series(BK)

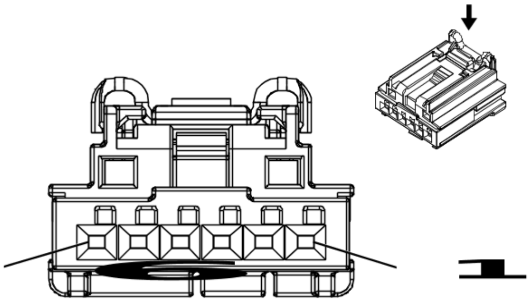
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK	1150	Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	VT / YE	143	Accessory Ignition Voltage	I	—

X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))



3960313

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 0.64 Generation Y Series(BK)

Terminal Part Information

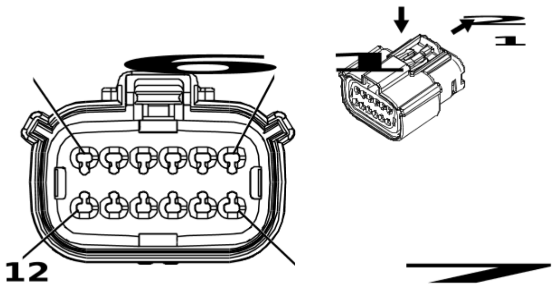
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (LT BU)	No Tool Required

X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / YE	143	Accessory Ignition Voltage	I	—
2	0.5	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.5	BK	1250	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

Inline Harness Connector End Views

X100 Front Bumper Harness to Body Harness (T3U/UD5)



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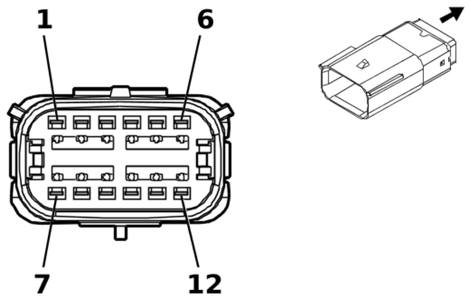


4862194

Connector Part Information

Harness Type: Front Bumper

OEM Connector: 33276998

Service Connector: Service by Harness - See Part Catalog

Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 15521147

Service Connector: 19371239

Description: 12 <p01>-Way M 1.5 OCS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	84779405	J-35616-3 (GY)	J-38125-217

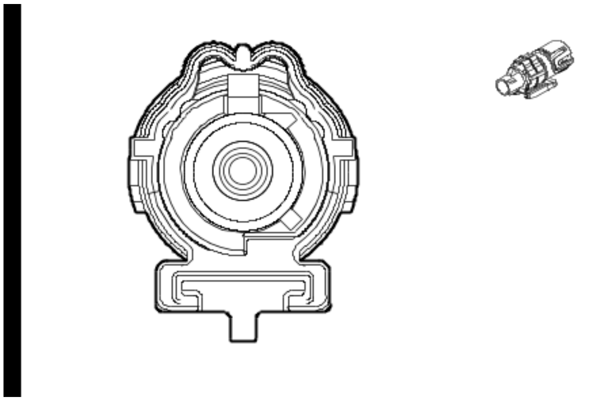
X100 Front Bumper Harness to Body Harness (T3U/UD5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	250	I	—	Ground	1	0.5	BK	250	II	—
2	0.5	VT / GY	5218	I	UD5	Right Front Middle Parking Assist Sensor	2	0.5	VT / GY	5218	II	UD5
3	0.5	WH / GY	5217	I	UD5	Right Front Outer Parking Assist Sensor	3	0.5	WH / GY	5217	II	UD5
4	0.5	BK	150	I	—	Ground	4	0.75	BK	150	II	—
5	0.5	VT / WH	5215	I	UD5	Left Front Outer Parking Assist Sensor	5	0.5	VT / WH	5215	II	UD5
6	0.5	BK / BU	5214	I	UD5	Front Parking Assist Sensor Low Reference	6	0.5	BK / BU	5214	II	UD5
7	0.5	YE / GY	5216	I	UD5	Left Front Middle Parking Assist Sensor	7	0.5	YE / GY	5216	II	UD5
8	0.5	YE / VT	5213	I	UD5	Front Left/ Right/Middle Parking Assist Sensor	8	0.5	YE / VT	5213	II	UD5

X100 Front Bumper Harness to Body Harness (T3U/UD5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.5	BN / VT	2234	I	T3U	Front Fog Lamp Control	9	0.5	BN / VT	2234	II	T3U
10 - 12	—	—	—	—	—	Not Occupied	10 - 12	—	—	—	—	—

X109 Chassis Harness to Body Harness (UVB/UVI/UVN/UVS)



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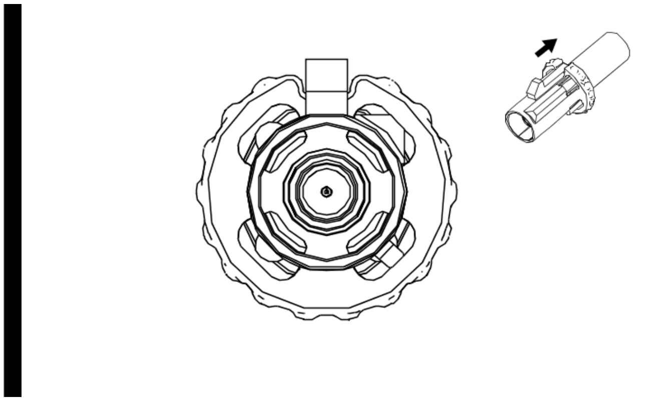


4380044

Connector Part Information

Harness Type: Chassis COAX

OEM Connector: 13519213

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type, Sealed(BN)

Connector Part Information

Harness Type: Body COAX

OEM Connector: 13529787

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way M Coax Type(BN)

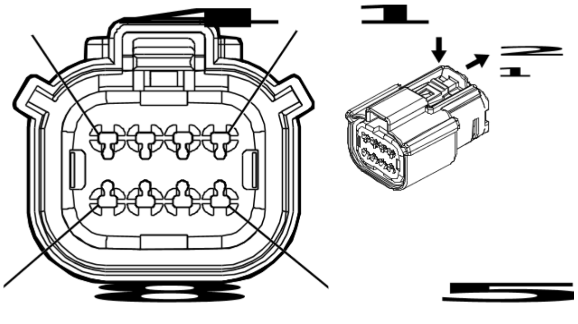
Terminal Part Information

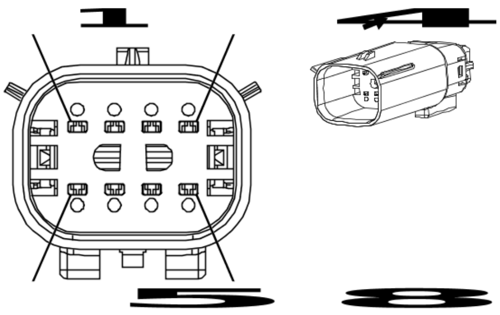
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X109 Chassis Harness to Body Harness (UVB/UVI/UVN/UVS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X110 Body Harness to Left Headlamp Harness





Connector Part Information

Harness Type: Body
OEM Connector: 35037827
Service Connector: 84928314
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way M (BK)

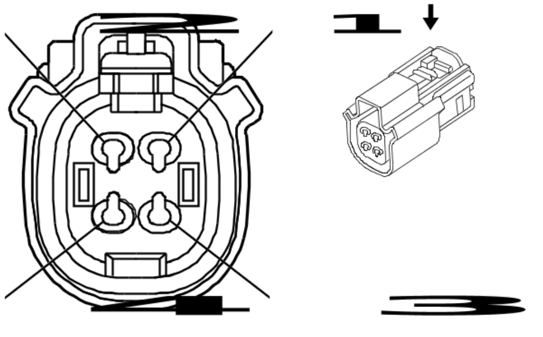
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X110 Body Harness to Left Headlamp Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	150	I	—	Ground	1	0.75	BK	150	II	—
2	0.75	YE	2227	I	—	Left Headlamp Control	2	0.75	BK	2227	II	—
3	0.75	YE	712	I	—	Left Headlamp Low Beam Control	3	0.75	BK	712	II	—
4	0.75	WH	711	I	—	Left Headlamp High Beam Control	4	0.75	BK	711	II	—
5	0.5	VT / GY	709	I	—	Left Park Lamp Control	5	0.5	BK	709	II	—
6	0.35	BU / VT	6568	I	GFD/ GFG/ GFU/ GFW	Front Turn Signal Lamp Feedback Signal	6	0.35	BK	6568	II	GFD/ GFG/ GFU/ GFW
7	0.5	BU / WH	1314	I	—	Left Front Turn Signal Lamp Control	7	0.5	BK	1314	II	—
8	0.35	GY / BU	7538	I	—	Left Front DRL Control	8	0.35	BK	7538	II	—

X111 Front Axle Harness to Engine Harness (NPO/NQH)



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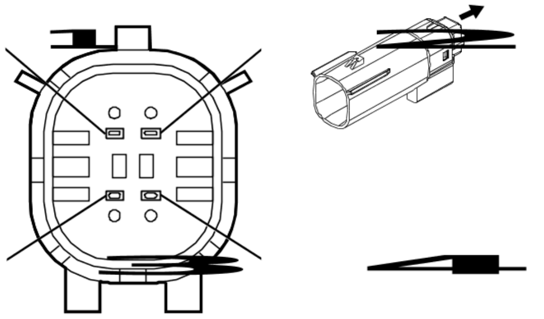


2368875

Connector Part Information

Harness Type: Front Axle
OEM Connector: 33346391
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Engine
OEM Connector: 33344515
Service Connector: 84838880
Description: 4 <p01>-Way M 1.5 MX Series, Sealed(BK)

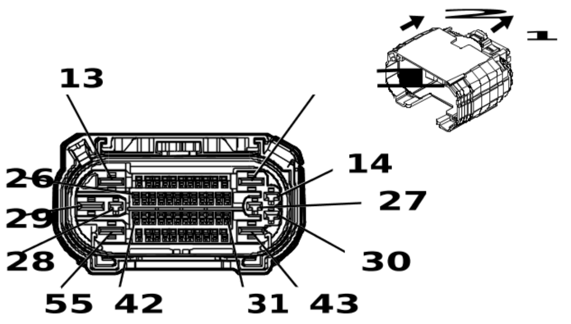
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X111 Front Axle Harness to Engine Harness (NPO/NQH)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	4450	I	—	Ground	1	0.5	BK	4450	II	—
2	0.5	YE / WH	1695	I	—	4WD Locked Range Indicator Control 4WD Locked Range Indicator Control	2	0.5	YE / WH	1695	II	—
3	0.5	VT / BK	2139	I	—	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	3	0.5	VT / BK	2139	II	—
4	0.5	GY / BK	1570	I	—	Front Axle Actuator Control Front Axle Actuator Control	4	0.5	GY / BK	1570	II	—

X115 Engine Harness to Body Harness (L3B)



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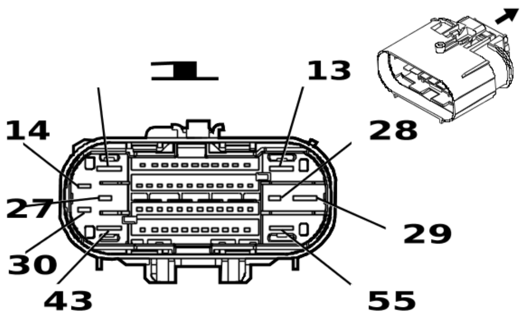


4994369

Connector Part Information

Harness Type: Engine
OEM Connector: 35179575
Service Connector: 19371184
Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body
OEM Connector: 35205185
Service Connector: 84727363
Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-16 (LT GN)	J-38125-215A
II	19371217	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-215A
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A
VI	84867141	J-35616-17 (LT GN)	J-38125-215A

X115 Engine Harness to Body Harness (L3B)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.35	BK / BU	1271	V	—
4	0.5	BN / WH	419	I	—	Check Engine Indicator Control	4	0.35	BN / WH	419	V	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.35	GN / WH	1162	V	—
6	—	—	—	—	—	Wait To Start Indicator Control	6	0.35	GN / BN	507	V	—
7 - 14	—	—	—	—	—	Not Occupied	7 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.35	YE	4063	V	—

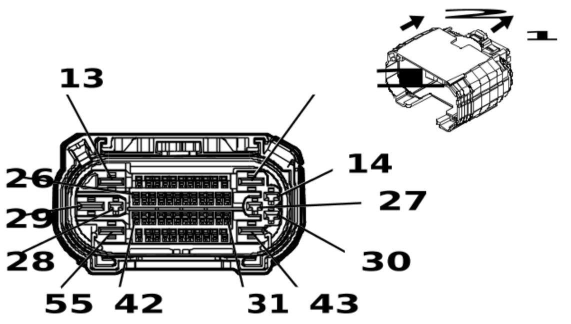
X115 Engine Harness to Body Harness (L3B) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.5	VT / GN	439	I	—	Run/Crank Ignition 1 Voltage	16	0.5	VT / GN	439	V	—
17	0.5	WH / BU	5986	I	—	Serial Data Communication Enable	17	0.35	WH / BU	5986	V	—
18	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	18	0.35	BK / GY	2204	V	—
19	0.5	WH / VT	4108	I	—	Driver Mode Switch Signal	19	0.35	WH / BN	2203	V	—
20	0.5	BU / RD	460	I	—	Engine Control Sensors 5 Volt Reference 1	20	0.35	GY	4109	V	—
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	22	0.35	VT / YE	5985	V	—
23	0.5	GN / VT	4621	I	—	Engine Control Module LIN Bus 1	23	0.5	GN / VT	4621	V	—
24	0.5	BU / BK	7493	I	—	High Speed GMLAN Serial Data [+] 3	24	0.5	BU / BK	7493	V	—
25	0.5	WH	7494	I	—	High Speed GMLAN Serial Data [-] 3	25	0.5	WH	7494	V	—
26	0.5	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	26	0.35	BU / GY	636	V	—
27 - 30	—	—	—	—	—	Not Occupied	27 - 30	—	—	—	—	—
31	0.5	WH / BU	6311	I	—	Cruise/ETC/ TCC Brake Signal	31	0.35	WH / BU	6311	V	—
32	0.5	VT / BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	32	0.35	VT / BU	6091	V	—
33	0.5	BN	1560	I	—	Neutral Indicator Control	33	0.35	BN	1560	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	35	0.35	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.35	WH / GN	5380	V	—

X115 Engine Harness to Body Harness (L3B) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.35	WH / RD	5381	V	—
38	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	38	0.5	BU	2500	V	—
39	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	39	0.5	WH	2501	V	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.35	BK / VT	1272	V	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.5	YE / BK	625	I	—	Starter Enable Relay Control	42	0.5	YE / BK	625	V	—
43	4	BK / WH	451	III	—	Signal Ground	43	4	BK / WH	2251	IV	—
44	1.5	RD / GN	1840	II	—	Battery Positive Voltage	44	1	RD / GN	1840	VI	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	46	0.35	BK / GN	580	V	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.35	BU / BN	7573	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.35	YE / WH	1161	V	—
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.35	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.35	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.35	BU / YE	7574	V	—
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X115 Engine Harness to Body Harness (L82)



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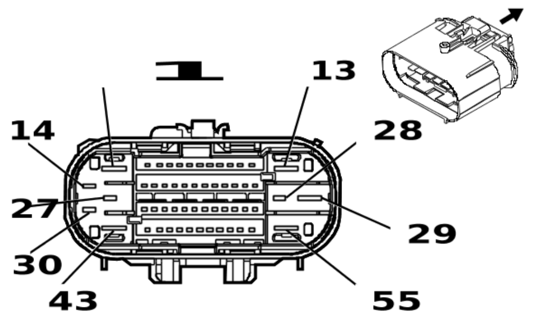


4994369

Connector Part Information

Harness Type: Engine
OEM Connector: 35179599
Service Connector: 19371184
Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body
OEM Connector: 35205185
Service Connector: 84727363
Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-16 (LT GN)	J-38125-215A
II	19371217	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-215A
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A
VI	84867141	J-35616-17 (LT GN)	J-38125-215A

X115 Engine Harness to Body Harness (L82)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.35	BK / BU	1271	V	—
4	0.5	BN / WH	419	I	—	Check Engine Indicator Control	4	0.35	BN / WH	419	V	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.35	GN / WH	1162	V	—
6 - 14	—	—	—	—	—	Not Occupied	6 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.35	YE	4063	V	—
16	0.5	VT / GN	439	I	—	Run/Crank Ignition 1 Voltage	16	0.5	VT / GN	439	V	—

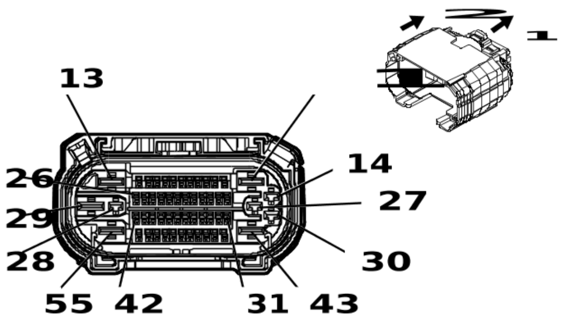
X115 Engine Harness to Body Harness (L82) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
17	0.5	WH / BU	5986	I	—	Serial Data Communication Enable	17	0.35	WH / BU	5986	V	—
18	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	18	0.35	BK / GY	2204	V	—
19	0.5	WH / BN	2203	I	—	Enhanced Driver Mode 2 Switch Signal	19	0.35	WH / BN	2203	V	—
20	0.5	BU / RD	460	I	—	Engine Control Sensors 5 Volt Reference 1	20	0.35	GY	4109	V	—
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	22	0.35	VT / YE	5985	V	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.5	BU / BK	7493	I	—	High Speed GMLAN Serial Data [+] 3	24	0.5	BU / BK	7493	V	—
25	0.5	WH	7494	I	—	High Speed GMLAN Serial Data [-] 3	25	0.5	WH	7494	V	—
26	0.5	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	26	0.35	BU / GY	636	V	—
27 - 30	—	—	—	—	—	Not Occupied	27 - 30	—	—	—	—	—
31	0.5	WH / BU	6311	I	—	Cruise/ETC/ TCC Brake Signal	31	0.35	WH / BU	6311	V	—
32	0.5	VT / BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	32	0.35	VT / BU	6091	V	—
33	0.5	BN	1560	I	—	Neutral Indicator Control	33	0.35	BN	1560	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	35	0.35	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.35	WH / GN	5380	V	—
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.35	WH / RD	5381	V	—

X115 Engine Harness to Body Harness (L82) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
38	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	38	0.5	BU	2500	V	—
39	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	39	0.5	WH	2501	V	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.35	BK / VT	1272	V	—
41 - 42	—	—	—	—	—	Not Occupied	41 - 42	—	—	—	—	—
43	4	BK / WH	451	III	—	Signal Ground	43	4	BK / WH	2251	IV	—
44	1.5	RD / GN	1840	II	—	Battery Positive Voltage	44	1	RD / GN	1840	VI	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	46	0.35	BK / GN	580	V	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.35	BU / BN	7573	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.35	YE / WH	1161	V	—
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.35	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.35	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.35	BU / YE	7574	V	—
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X115 Engine Harness to Body Harness (L84/L87)



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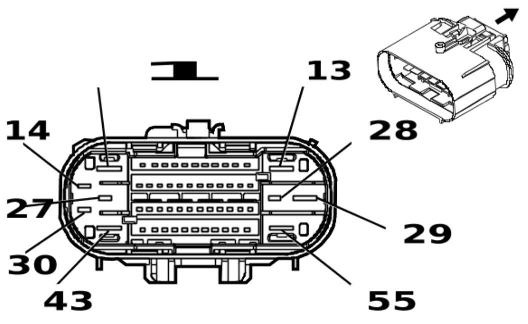


4994369

Connector Part Information

Harness Type: Engine
OEM Connector: 35179598
Service Connector: 19371184
Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body
OEM Connector: 35205185
Service Connector: 84727363
Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-16 (LT GN)	J-38125-215A
II	19371217	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-215A
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A

X115 Engine Harness to Body Harness (L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.35	BK / BU	1271	V	—
4	0.5	BN / WH	419	I	—	Check Engine Indicator Control	4	0.35	BN / WH	419	V	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.35	GN / WH	1162	V	—
6 - 14	—	—	—	—	—	Not Occupied	6 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.35	YE	4063	V	—
16	0.5	VT / GN	439	I	—	Run/Crank Ignition 1 Voltage	16	0.5	VT / GN	439	V	—
17	0.5	WH / BU	5986	I	—	Serial Data Communication Enable	17	0.35	WH / BU	5986	V	—

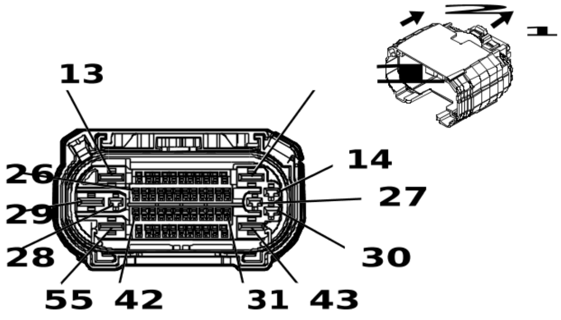
X115 Engine Harness to Body Harness (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	18	0.35	BK / GY	2204	V	—
19	0.5	WH / BN	2203	I	—	Enhanced Driver Mode 2 Switch Signal	19	0.35	WH / BN	2203	V	—
20	0.5	BU / RD	460	I	—	Engine Control Sensors 5 Volt Reference 1	20	0.35	GY	4109	V	—
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	22	0.35	VT / YE	5985	V	—
23	0.5	GN / VT	4621	I	—	Engine Control Module LIN Bus 1	23	0.5	GN / VT	4621	V	—
24	0.5	BU / BK	7493	I	—	High Speed GMLAN Serial Data [+] 3	24	0.5	BU / BK	7493	V	—
25	0.5	WH	7494	I	—	High Speed GMLAN Serial Data [-] 3	25	0.5	WH	7494	V	—
26	0.5	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	26	0.35	BU / GY	636	V	—
27 - 30	—	—	—	—	—	Not Occupied	27 - 30	—	—	—	—	—
31	0.5	WH / BU	6311	I	—	Cruise/ETC/ TCC Brake Signal	31	0.35	WH / BU	6311	V	—
32	0.5	VT / BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	32	0.35	VT / BU	6091	V	—
33	0.5	BN	1560	I	—	Neutral Indicator Control	33	0.35	BN	1560	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	35	0.35	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.35	WH / GN	5380	V	—
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.35	WH / RD	5381	V	—
38	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	38	0.5	BU	2500	V	—

X115 Engine Harness to Body Harness (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
39	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	39	0.5	WH	2501	V	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.35	BK / VT	1272	V	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.5	YE / BK	625	I	—	Starter Enable Relay Control	42	0.5	YE / BK	625	V	—
43	4	BK / WH	451	III	—	Signal Ground	43	4	BK / WH	2251	IV	—
44	1.5	RD / GN	1840	II	—	Battery Positive Voltage	44	1	RD / GN	1840	V	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	46	0.35	BK / GN	580	V	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.35	BU / BN	7573	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.35	YE / WH	1161	V	—
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.35	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.35	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.35	BU / YE	7574	V	—
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X115 Engine Harness to Body Harness (LM2)



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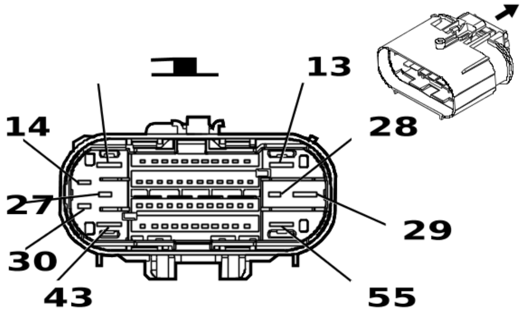


4994369

Connector Part Information

Harness Type: Engine
OEM Connector: 35016653
Service Connector: 19371184
Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body
OEM Connector: 35205185
Service Connector: 84727363
Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-16 (LT GN)	J-38125-215A
II	19371217	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-215A
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A

X115 Engine Harness to Body Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	1	BK	9003	II	—	—	2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.35	BK / BU	1271	V	—
4	0.5	BN / WH	419	I	—	Check Engine Indicator Control	4	0.35	BN / WH	419	V	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.35	GN / WH	1162	V	—
6	0.5	GN / BN	507	I	—	Wait To Start Indicator Control	6	—	—	—	—	—
7 - 11	—	—	—	—	—	Not Occupied	7 - 11	—	—	—	—	—
12	1	BK	9003	II	—	—	12	—	—	—	—	—
13 - 14	—	—	—	—	—	Not Occupied	13 - 14	—	—	—	—	—

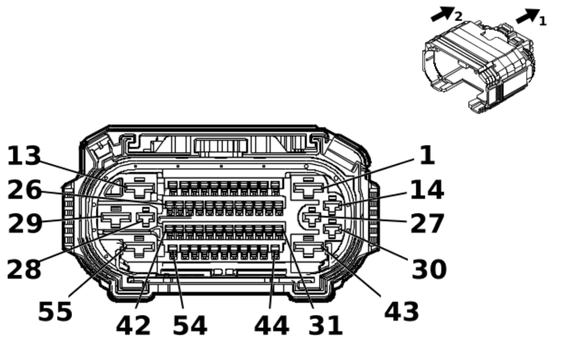
X115 Engine Harness to Body Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.35	YE	4063	V	—
16	0.5	VT / GN	439	I	—	Run/Crank Ignition 1 Voltage	16	0.5	VT / GN	439	V	—
17	0.5	WH / BU	5986	I	—	Serial Data Communication Enable	17	0.35	WH / BU	5986	V	—
18	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	18	0.35	BK / GY	2204	V	—
19	0.5	WH / BN	2203	I	—	Enhanced Driver Mode 2 Switch Signal	19	0.35	WH / BN	2203	V	—
20	0.5	BU / RD	460	I	—	Engine Control Sensors 5 Volt Reference 1	20	0.35	GY	4109	V	—
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	22	0.35	VT / YE	5985	V	—
23	0.5	GN / VT	4621	I	—	Engine Control Module LIN Bus 1	23	0.5	GN / VT	4621	V	—
24	0.5	BU / BK	7493	I	—	High Speed GMLAN Serial Data [+] 3	24	0.5	BU / BK	7493	V	—
25	0.5	WH	7494	I	—	High Speed GMLAN Serial Data [-] 3	25	0.5	WH	7494	V	—
26	0.5	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	26	0.35	BU / GY	636	V	—
27 - 30	—	—	—	—	—	Not Occupied	27 - 30	—	—	—	—	—
31	0.5	WH / BU	6311	I	—	Cruise/ETC/ TCC Brake Signal	31	0.35	WH / BU	6311	V	—
32	0.5	VT / BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	32	0.35	VT / BU	6091	V	—
33	0.5	BN	1560	I	—	Neutral Indicator Control	33	0.35	BN	1560	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	35	0.35	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.35	WH / GN	5380	V	—

X115 Engine Harness to Body Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.35	WH / RD	5381	V	—
38	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	38	0.5	BU	2500	V	—
39	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	39	0.5	WH	2501	V	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.35	BK / VT	1272	V	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.5	YE / BK	625	I	—	Starter Enable Relay Control	42	0.5	YE / BK	625	V	—
43	6	BK / WH	451	III	—	Signal Ground	43	4	BK / WH	2251	IV	—
44	1.5	RD / GN	1840	II	—	Battery Positive Voltage	44	1	RD / GN	1840	V	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	46	0.35	BK / GN	580	V	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.35	BU / BN	7573	V	—
48	0.5	RD / GN	40	I	—	Battery Positive Voltage	48	0.35	RD / GN	40	V	—
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.35	YE / WH	1161	V	—
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.35	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.35	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.35	BU / YE	7574	V	—
54	1	BK	9003	II	—	—	54	—	—	—	—	—
55	—	—	—	—	—	Not Occupied	55	—	—	—	—	—

X115 Engine Harness to Body Harness (LV3)



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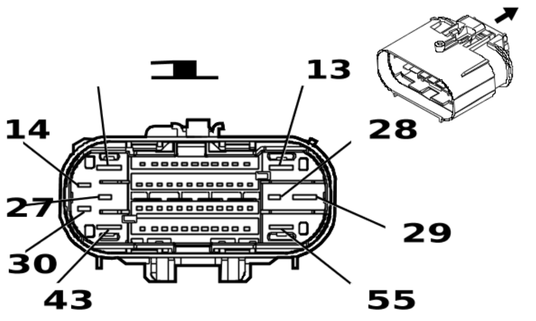


4994369

Connector Part Information

Harness Type: Engine

OEM Connector: 35179597

Service Connector: 19371184

Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body

OEM Connector: 35205185

Service Connector: 84727363

Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-16 (LT GN)	J-38125-215A
II	19371217	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-215A
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A

X115 Engine Harness to Body Harness (LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.35	BK / BU	1271	V	—
4	0.5	BN / WH	419	I	—	Check Engine Indicator Control	4	0.35	BN / WH	419	V	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.35	GN / WH	1162	V	—
6 - 14	—	—	—	—	—	Not Occupied	6 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.35	YE	4063	V	—
16	0.5	VT / GN	439	I	—	Run/Crank Ignition 1 Voltage	16	0.5	VT / GN	439	V	—
17	0.5	WH / BU	5986	I	—	Serial Data Communication Enable	17	0.35	WH / BU	5986	V	—

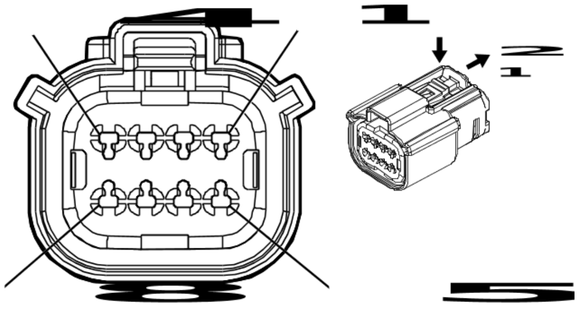
X115 Engine Harness to Body Harness (LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	18	0.35	BK / GY	2204	V	—
19	0.5	WH / BN	2203	I	—	Enhanced Driver Mode 2 Switch Signal	19	0.35	WH / BN	2203	V	—
20	0.5	BU / RD	460	I	—	Engine Control Sensors 5 Volt Reference 1	20	0.35	GY	4109	V	—
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	22	0.35	VT / YE	5985	V	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.5	BU / BK	7493	I	—	High Speed GMLAN Serial Data [+] 3	24	0.5	BU / BK	7493	V	—
25	0.5	WH	7494	I	—	High Speed GMLAN Serial Data [-] 3	25	0.5	WH	7494	V	—
26	0.5	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	26	0.35	BU / GY	636	V	—
27 - 30	—	—	—	—	—	Not Occupied	27 - 30	—	—	—	—	—
31	0.5	WH / BU	6311	I	—	Cruise/ETC/TCC Brake Signal	31	0.35	WH / BU	6311	V	—
32	0.5	VT / BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	32	0.35	VT / BU	6091	V	—
33	0.5	BN	1560	I	—	Neutral Indicator Control	33	0.35	BN	1560	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	35	0.35	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.35	WH / GN	5380	V	—
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.35	WH / RD	5381	V	—
38	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	38	0.5	BU	2500	V	—

X115 Engine Harness to Body Harness (LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
39	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	39	0.5	WH	2501	V	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.35	BK / VT	1272	V	—
41 - 42	—	—	—	—	—	Not Occupied	41 - 42	—	—	—	—	—
43	4	BK / WH	451	III	—	Signal Ground	43	4	BK / WH	2251	IV	—
44	1.5	RD / GN	1840	II	—	Battery Positive Voltage	44	1	RD / GN	1840	V	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	46	0.35	BK / GN	580	V	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.35	BU / BN	7573	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.35	YE / WH	1161	V	—
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.35	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.35	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.35	BU / YE	7574	V	—
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X120 Fog Lamp Accessory Harness to Right Headlamp Harness (-S3U)



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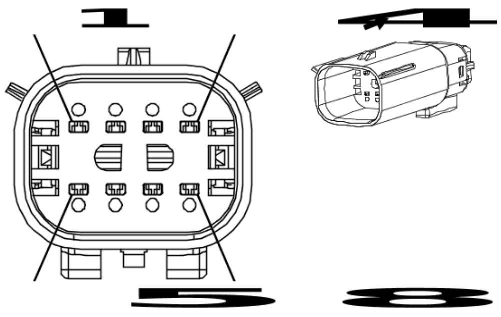


2667653

Connector Part Information

Harness Type: Body
OEM Connector: 35037827
Service Connector: 84928314
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way M (BK)

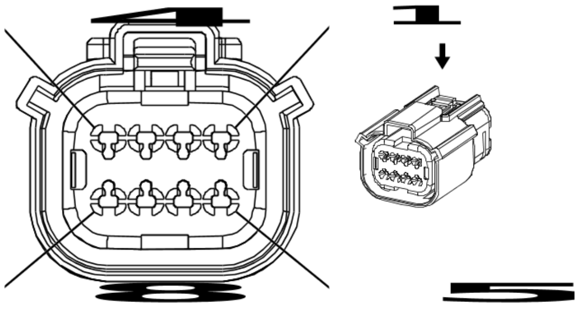
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X120 Fog Lamp Accessory Harness to Right Headlamp Harness (-S3U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	250	I	—	Ground	1	0.75	BK	250	II	—
2	0.75	YE / GY	2226	I	—	Right Headlamp Control	2	0.75	YE / GY	2226	II	—
3	1	YE	312	I	—	Right Headlamp Low Beam Control	3	1	YE	312	II	—
4	0.75	WH	311	I	—	Right Headlamp High Beam Control	4	0.75	WH	311	II	—
5	0.5	GY / BN	309	I	—	Right Park Lamp Control	5	0.5	GY / BN	309	II	—
6	0.35	WH / BU	7545	I	GFD/ GFG/ GFU/ GFW	Right Front Turn Signal Lamp Feedback Signal	6	0.35	WH / BU	7545	II	GFD/ GFG/ GFU/ GFW
7	0.5	GN / VT	1315	I	—	Right Front Turn Signal Lamp Control	7	0.5	GN / VT	1315	II	—
8	0.35	BU / BN	7539	I	—	Right Front DRL Control	8	0.35	BU / BN	7539	II	—

X120 Fog Lamp Accessory Harness to Right Headlamp Harness (S3U)



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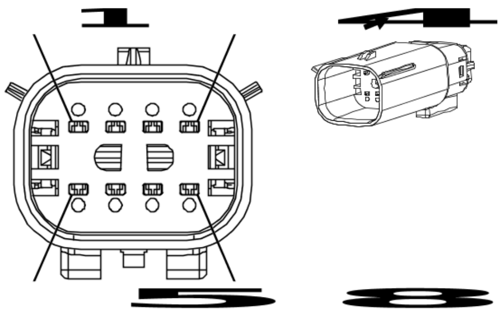


2667653

Connector Part Information

Harness Type: Fog Lamp Accessory
OEM Connector: 13503524
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Right Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way M (BK)

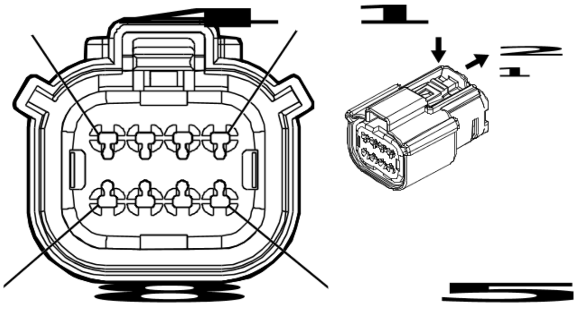
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X120 Fog Lamp Accessory Harness to Right Headlamp Harness (S3U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	250	I	—	Ground	1	0.75	BK	250	II	—
2	0.75	YE / GY	2226	I	—	Right Headlamp Control	2	0.75	YE / GY	2226	II	—
3	1	YE	312	I	—	Right Headlamp Low Beam Control	3	1	YE	312	II	—
4	0.75	WH	311	I	—	Right Headlamp High Beam Control	4	0.75	WH	311	II	—
5	0.50	GY / BN	309	I	—	Right Park Lamp Control	5	0.50	GY / BN	309	II	—
6	0.35	WH / BU	7545	I	GFD/ GFG/ GFU/ GFW	Right Front Turn Signal Lamp Feedback Signal	6	0.35	WH / BU	7545	II	GFD/ GFG/ GFU/ GFW
7	0.5	GN / VT	1315	I	—	Right Front Turn Signal Lamp Control	7	0.5	GN / VT	1315	II	—
8	0.35	BU / BN	7539	I	—	Right Front DRL Control	8	0.35	BU / BN	7539	II	—

X121 Body Harness to Fog Lamp Accessory Harness (S3U)



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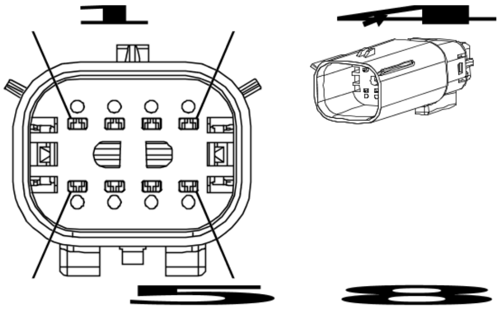


2667653

Connector Part Information

Harness Type: Body
OEM Connector: 33472-4806
Service Connector: 84928314
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fog Lamp Accessory
OEM Connector: 13503538
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way M 1.5 MX Series, Sealed(BK)

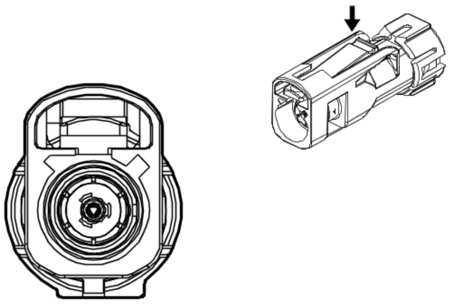
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required
III	Not required	J-35616-2A (GY)	No Tool Required

X121 Body Harness to Fog Lamp Accessory Harness (S3U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	250	II	—	Ground	1	0.75	BK	250	III	—
2	0.75	YE / GY	2226	II	—	Right Headlamp Control	2	0.75	YE / GY	2226	III	—
3	1	YE	312	II	—	Right Headlamp Low Beam Control	3	1	YE	312	III	—
4	0.75	WH	311	II	—	Right Headlamp High Beam Control	4	0.75	WH	311	III	—
5	0.5	GY / BN	309	I	—	Right Park Lamp Control	5	0.5	GY / BN	309	III	—
6	0.35	WH / BU	7545	I	GFD/ GFG/ GFU/ GFW	Right Front Turn Signal Lamp Feedback Signal	6	0.35	WH / BU	7545	III	GFD/ GFG/ GFU/ GFW
7	0.5	GN / VT	1315	I	—	Right Front Turn Signal Lamp Control	7	0.5	GN / VT	1315	III	—
8	0.35	BU / BN	7539	I	—	Right Front DRL Control	8	0.35	BU / BN	7539	III	—

X127 Grille Frontview Camera Harness to Body Harness (UVS)



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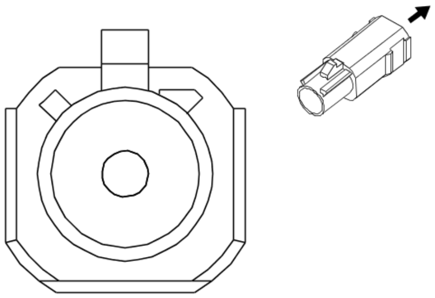


3681549

Connector Part Information

Harness Type: Grille Frontview Camera COAX

OEM Connector: 13514209

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type(BK)

Connector Part Information

Harness Type: Body COAX

OEM Connector: 13514206

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way M Coax Type(BK)

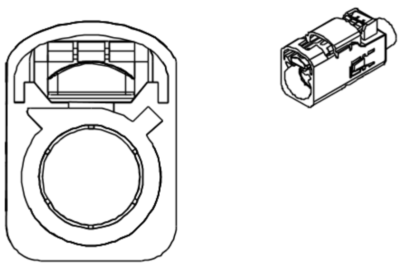
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X127 Grille Frontview Camera Harness to Body Harness (UVS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Front Vision Camera #1 Signal	—	—	Coax Cable	—	I	—

X129 Body Coax Harness to Chassis Coax Harness (UVI/UVN/UVS)



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2807580

Connector Part Information

Harness Type: Body Coax

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type

Connector Part Information

Harness Type: Coax Cable

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Descriptionr: 1 <p01>-Way F Coax Type

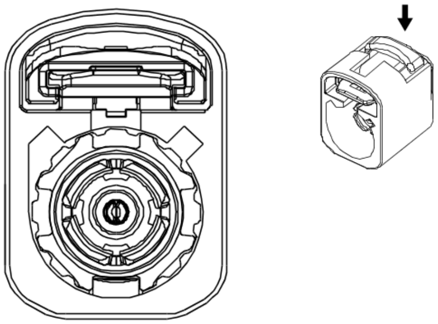
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X129 Body Coax Harness to Chassis Coax Harness (UVI/UVN/UVS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Trailer Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X130 Body Coax Harness to Chassis Coax Harness (UVN/UVS)



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4045007

Connector Part Information

Harness Type: Body Coax

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type

Connector Part Information

Harness Type: Coax Cable

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Descriptionr: 1 <p01>-Way F Coax Type

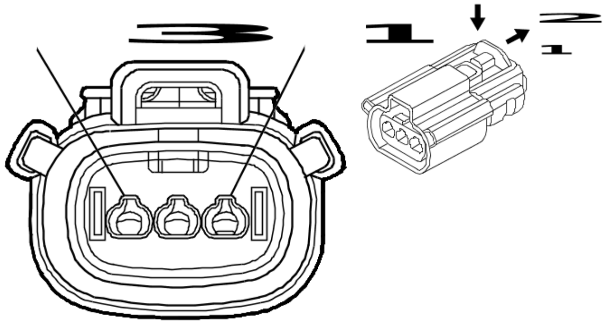
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X130 Body Coax Harness to Chassis Coax Harness (UVN/UVS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Trailer 2 Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)



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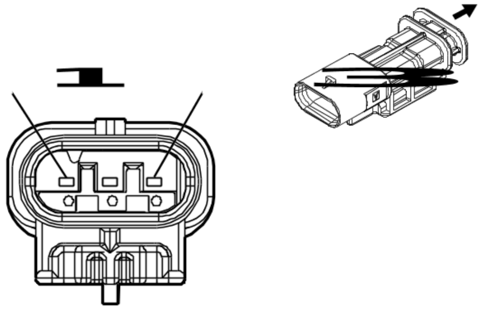


5068799

Connector Part Information

Harness Type: Engine
OEM Connector: 35143007
Service Connector: 84719651
Description: 3 <p01>-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way M (BK)

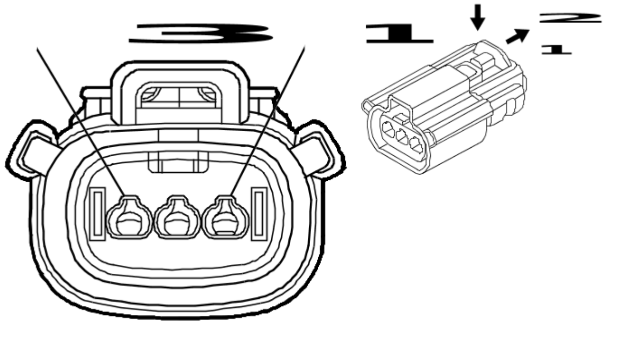
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT / BU	5705	I	—	Powertrain Main Relay Control	1	0.5	VT / BU	5705	II	—
2	0.5	GN / VT	4621	I	—	Engine Control Module LIN Bus 1	2	0.5	GN / VT	4621	II	—
3	0.5 1	BK BK	4450 4450	I I	— —	Ground Ground	3	0.5	BK	4450	II	—

X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)



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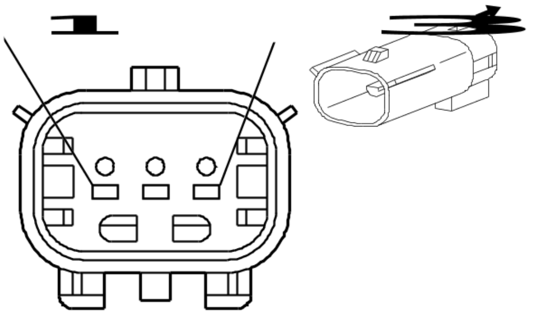


1870038

Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: 13526813
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Active Grille Air Shutter 2 Actuator Jumper
OEM Connector: 13526822
Service Connector: Service by Harness - See Part Catalog
Description: 3 <p01>-Way M 1.5 MX Series, Sealed(BK)

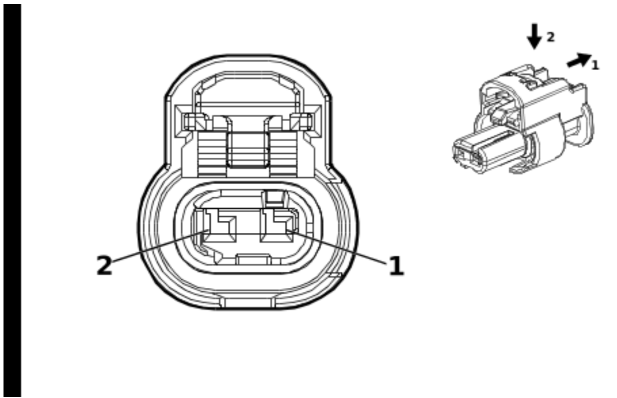
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	Not Available	No Tool Required
II	Not required	Not Available	No Tool Required

X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT / BU	5705	I	—	Powertrain Main Relay Control	1	0.5	VT / BU	5705	II	—
2	0.5	GN / VT	4621	I	—	Engine Control Module LIN Bus 1	2	0.5	GN / VT	4621	II	—
3	0.5	BK	4450	I	—	Ground	3	0.5	BK	4450	II	—

X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)



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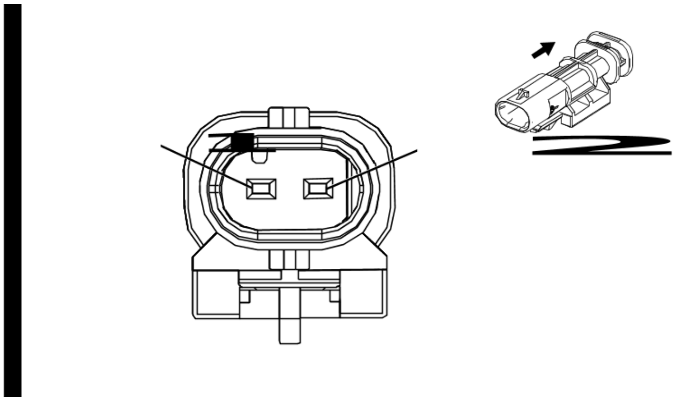


2474755

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296694-1
Service Connector: 19366858
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 13591337
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 Multilock Series, Sealed(BK)

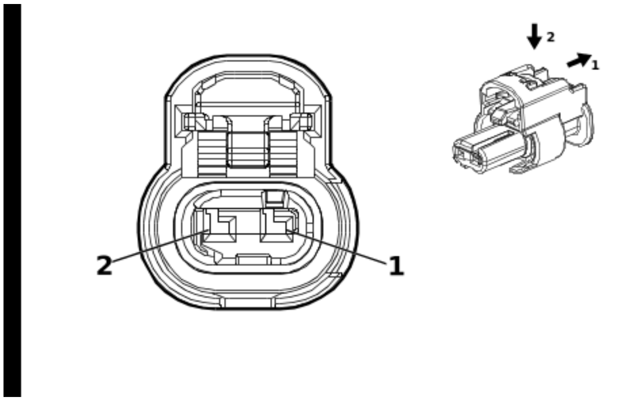
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required

X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN / WH	1107	I	—	Left Front Shock Absorber Actuator Control	1	0.75	BU / WH	1107	II	—
2	0.75	GY / BU	1113	I	—	Left Front Shock Absorber Actuator Control	2	0.75	GY	1113	II	—

X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)



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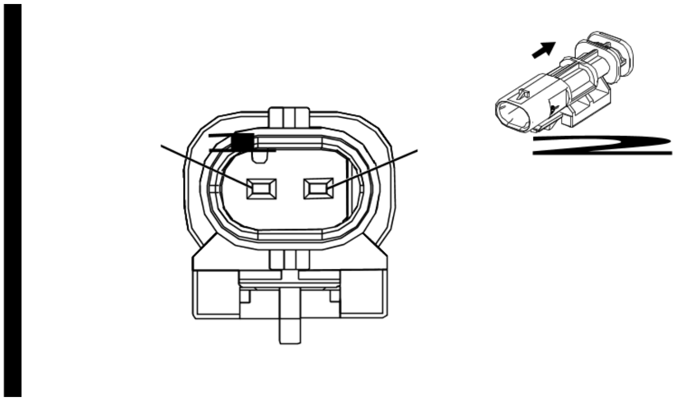


2474755

Connector Part Information

Harness Type: Chassis
OEM Connector: 1-2296694-1
Service Connector: 19366858
Description: 2 <p01>-Way F 1.2 MCON Series, Sealed(BK)

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 13591337
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 1.2 Multilock Series, Sealed(BK)

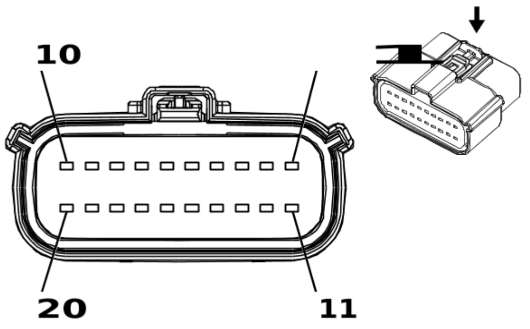
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required

X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN / BU	1116	I	—	Right Front Shock Absorber Actuator Control	1	0.75	BU / WH	1116	II	—
2	0.75	GY / WH	1117	I	—	Right Front Shock Absorber Actuator Control	2	0.75	GY	1117	II	—

X138 Body Harness to Chassis Harness (Crew Cab/Extended Cab)



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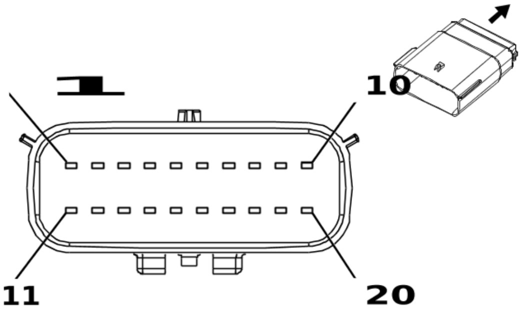


2871861

Connector Part Information

Harness Type: Body
OEM Connector: 13650143
Service Connector: 19300557
Description: 20 <p01>-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33482-2101
Service Connector: 19351705
Description: 20 <p01>-Way M 1.5 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	85528055	J-35616-2A (GY)	J-38125-217
III	19119842	J-35616-3 (GY)	J-38125-217

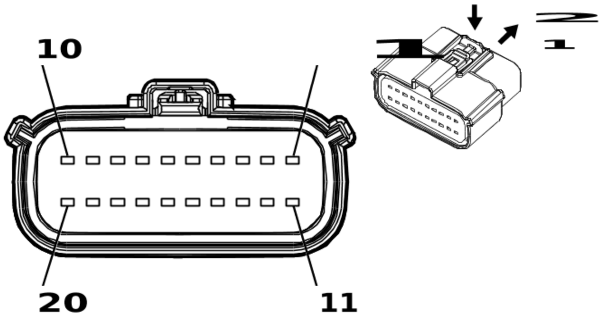
X138 Body Harness to Chassis Harness (Crew Cab/Extended Cab)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT / GN	1739	I	UVC	Run/Crank Ignition 1 Voltage	1	0.5	VT / GN	1739	III	UVC
2	0.35	BN / WH	7462	I	BRS	Running Board Steps Disable Signal	2	0.5	BN / WH	7462	III	BRS
3	0.35	WH / BU	6973	I	UVC	Rearview Camera Signal [-]	3	0.5	WH / BU	6973	III	UVC
4	0.75	GN / BN	2266	II	KC9/ KCA	DC/AC Inverter Control 2	4	0.75	GN / BN	2266	III	KC9/ KCA
5	0.5	VT / WH	5065	I	U1D	Stop Lamp Relay Coil Control	5	0.5	VT / WH	5065	III	U1D
6	0.35	GN	5060	I	—	Low Speed GMLAN Serial Data	6	0.5	GN	5060	III	—
7	0.5	BN / GN	3568	I	—	Rear Closure Passive Entry Antenna High Signal	7	0.5	BN / GN	3568	III	—
8	0.75	BK / WH	2264	II	KC9/ KCA	120V AC Phase A 2	8	0.75	BK / WH	2264	III	KC9/ KCA
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—

X138 Body Harness to Chassis Harness (Crew Cab/Extended Cab) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	RD / YE	2340	I	BOP	Battery Positive Voltage	10	0.5	RD / YE	2340	III	BOP
11	0.5	BK / WH	1751	I	UVC	Signal Ground	11	0.5	BK / WH	1751	III	UVC
12	0.35	BK	6974	I	UVC	Rearview Camera Low Reference	12	0.5	BU	6974	III	UVC
13	0.35	GY / YE	6972	I	UVC	Rearview Camera Signal [+]	13	0.5	GY / YE	6972	III	UVC
14	0.75	RD / WH	2265	II	KC9/ KCA	120V AC Phase B 2	14	0.75	RD / WH	2265	III	KC9/ KCA
15	0.35 0.5	WH / BU WH / BU	5986 5060	I I	— —	Serial Data Communication Enable Low Speed GMLAN Serial Data	15	0.5 0.5	WH / BU WH / BU	5986 5986	III	Z45 —
16	1	WH / VT	1430	II	QT5/ QT6	Exterior Courtesy Lamp Control	16	0.5	WH / VT	1430	III	QT5/ QT6
17	0.5	GN / GY	3569	I	—	Rear Closure Passive Entry Antenna Low Signal	17	0.5	GN / GY	3569	III	—
18	0.35	BN	2257	I	KC9/ KCA	Low Reference	18	0.5	BN	2257	III	KC9/ KCA
19	0.5	BU / GN	1304	I	IOS/ IOT	High Speed GMLAN Serial Data [+] 9	19	0.5	BU / GN	1304	III	IOS/ IOT
20	0.5	WH / GN	1305	I	IOS/ IOT	High Speed GMLAN Serial Data [-] 9	20	0.5	WH / GN	1305	III	IOS/ IOT

X138 Body Harness to Chassis Harness (Regular Cab)



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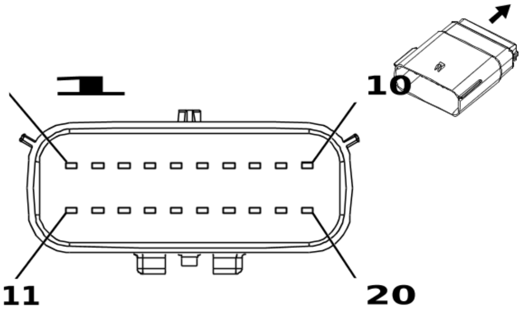


2871861

Connector Part Information

Harness Type: Body
OEM Connector: 35210697
Service Connector: 19300557
Description: 20 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33482-2101
Service Connector: 19351705
Description: 20 <p01>-Way M 1.5 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217
II	19119842	J-35616-3 (GY)	J-38125-217
II	19119842	J-35616-3 (GY)	J-38125-217

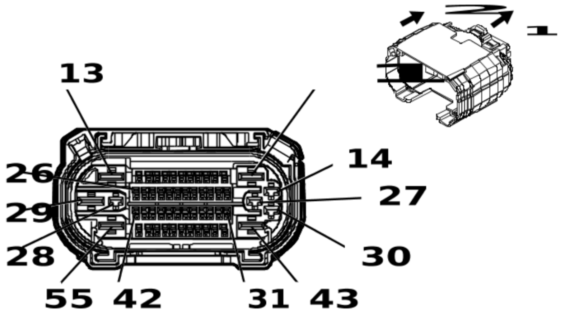
X138 Body Harness to Chassis Harness (Regular Cab)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT / GN	1739	I	UVC/ 5N5	Run/Crank Ignition 1 Voltage	1	0.5	VT / GN	1739	II	UVC/ 5N5
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	WH / BU	6973	I	UVC/ 5N5	Rearview Camera Signal [-]	3	0.5	WH / BU	6973	II	UVC/ 5N5
4	0.75	GN / BN	2266	I	KC9/ KCA	DC/AC Inverter Control 2	4	0.75	GN / BN	2266	II	KC9/ KCA
5	0.5	VT / WH	5065	I	U1D	Stop Lamp Relay Coil Control	5	0.5	VT / WH	5065	II	U1D
6	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	6	0.5	GN	5060	II	—
7	0.5	BN / GN	3568	I	—	Rear Closure Passive Entry Antenna High Signal	7	0.5	BN / GN	3568	II	—
8	0.75	BK / WH	2264	I	KC9/ KCA	120V AC Phase A 2	8	0.75	BK / WH	2264	II	KC9/ KCA
9 - 10	—	—	—	—	—	Not Occupied	9 - 10	—	—	—	—	—
11	0.5	BK / WH	1751	I	UVC/ 5N5	Signal Ground	11	0.5	BK / WH	1751	II	UVC/ 5N5

X138 Body Harness to Chassis Harness (Regular Cab) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12	0.35	BK	6974	I	UVC/ 5N5	Rearview Camera Low Reference	12	0.5	BU	6974	II	UVC/ 5N5
13	0.35	GY / YE	6972	I	UVC/ 5N5	Rearview Camera Signal [+]	13	0.5	GY / YE	6972	II	UVC/ 5N5
14	0.75	RD / WH	2265	I	KC9/ KCA	120V AC Phase B 2	14	0.75	RD / WH	2265	II	KC9/ KCA
15	0.5	WH / BU	5986	I	—	Serial Data Communication Enable Serial Data Communication Enable	15	0.5 0.5	WH / BU WH / BU	5986 5986	II	Z45 —
16	1	WH / VT	1430	I	QT5/ QT6	Exterior Courtesy Lamp Control	16	0.5	WH / VT	1430	II	QT5/ QT6
17	0.5	GN / GY	3569	I	—	Rear Closure Passive Entry Antenna Low Signal	17	0.5	GN / GY	3569	II	—
18	0.35	BN	2257	I	KC9/ KCA	Low Reference	18	0.5	BN	2257	II	KC9/ KCA
19	0.5	BU / GN	1304	I	IOS/ IOT	High Speed GMLAN Serial Data [+] 9	19	0.5	BU / GN	1304	II	IOS/ IOT
20	0.5	WH / GN	1305	I	IOS/ IOT	High Speed GMLAN Serial Data [-] 9	20	0.5	WH / GN	1305	II	IOS/ IOT

X140 Chassis Harness to Body Harness



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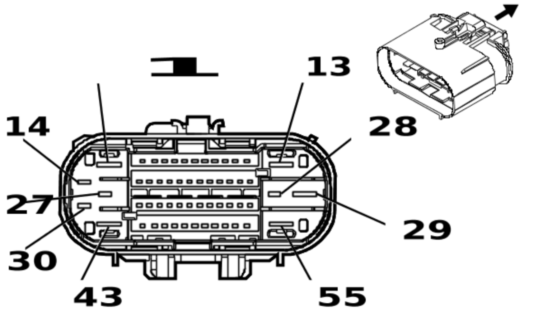

4993301

Connector Part Information

Harness Type: Chassis
OEM Connector: 35016652
Service Connector: 19371185
Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body
OEM Connector: 35205188
Service Connector: 84727364
Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332901	J-35616-35 (VT)	J-38125-212
II	19370818	J-35616-16 (LT GN)	J-38125-215A
II	19370818	J-35616-16 (LT GN)	J-38125-215A
III	19371217	J-35616-16 (LT GN)	J-38125-215A
IV	84634921	J-35616-42 (RD)	J-38125-215A
V	84847992	J-35616-32 (OR)	J-38125-36
VI	84867140	J-35616-17 (LT GN)	J-38125-215A
VI	84867140	J-35616-17 (LT GN)	J-38125-215A
VII	84992391	J-35616-5 (PU)	J-38125-215A

X140 Chassis Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	5	GN / VT	1988	IV	—	Right Park Brake Motor Apply Control	1	2.5	GN / VT	1988	V	—
2	1	BN / GN	19	III	—	Right Rear Stop/Turn Signal Lamp Control	2	1	BN / GN	19	VI	—
3	0.5	GY / YE	7128	II	—	Right Rear Wheel Speed Sensor Control	3	0.5	GY / YE	7128	VI	—
4	0.5	VT	882	II	—	Right Rear Wheel Speed Sensor Signal	4	0.5	VT	882	VI	—

X140 Chassis Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	0.5	GY / YE	1760	II	UKC	Left Side Object Detection LED Control	5	0.35	GY / YE	1760	VI	UKC
6	0.5	GY / WH	7064	II	—	Left Front Wheel Speed Sensor Control	6	0.5	GY / WH	7064	VI	—
7	0.5	GY	830	II	—	Left Front Wheel Speed Sensor Signal	7	0.5	GY	830	VI	—
8	0.5	GY / BN	7065	II	—	Right Front Wheel Speed Sensor Control	8	0.5	GY / BN	7065	VI	—
9	0.5	YE	872	II	—	Right Front Wheel Speed Sensor Signal	9	0.5	YE	872	VI	—
10	0.5	GY / BK	7127	II	—	Left Rear Wheel Speed Sensor Control	10	0.5	GY / BK	7127	VI	—
11	0.5	BU	884	II	—	Left Rear Wheel Speed Sensor Signal	11	0.5	BU	884	VI	—
12	1	YE / BU	18	III	—	Left Rear Stop/Turn Signal Lamp Control	12	1	YE / BU	18	VI	—
13	5	WH	2001	IV	—	Left Park Brake Motor Apply Control	13	2.5	WH	2001	V	—
14	2.5	RD / VT	1242	I	—	Battery Positive Voltage	14	2	RD / VT	1242	VII	—
15	0.75	BN / BK	7726	II	QK2	Minor Endgate Motor Low Reference	15	0.75	BN / BK	7726	VI	QK2
16	0.5	GY	7292	II	QT5	Major Endgate Release Switch Signal Exterior	16	0.35	GY	7292	VI	QT5
17	0.75	VT	7725	II	QK2	Minor Endgate Motor Control	17	0.75	VT	7725	VI	QK2
18	0.5	GN / YE	6846	II	—	Rear License Plate Lamp Control	18	0.35	GN / YE	6846	VI	—
19	0.5	YE / BK	2224	II	JL1	Trailer Brake Enable Signal	19	0.5	YE / BK	2224	VI	JL1
20	0.5	GN / YE	1616	II	—	Rear Brake Pad Wear Sensor Signal	20	0.5	GN / YE	1616	VI	—
21	0.75	GN	1299	II	QT5	Major Endgate Motor Control	21	0.75	GN	1299	VI	QT5

X140 Chassis Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
22	—	—	—	—	—	Accessory Wake-Up Serial Data	22	0.35	VT / YE	5985	VI	—
23	0.5	VT / GN	439	II	—	Run/Crank Ignition 1 Voltage	23	0.5	VT / GN	439	VI	—
24	0.5	YE	7294	II	QT5	Minor Endgate Release Switch Discrete Signal Exterior	24	0.35	YE	7294	VI	QT5
25	0.5	BN / WH	2374	II	UD5/ UD7	Object Sensor Voltage Reference	25	0.5	BN / WH	2374	VI	UD5/ UD7
26	0.5	YE / BU	2376	II	UD5/ UD7	Left Rear Middle Parking Assist Sensor Signal	26	0.5	YE / BU	2376	VI	UD5/ UD7
27	—	—	—	—	—	Ground	27	2.5	BK	150	VII	—
28	2.5	RD / GY	7040	I	QT6	Battery Positive Voltage	28	2.5	RD / GY	7040	VII	QT6
29	5	GY / BK	4369	IV	—	Left Park Brake Motor Low Reference	29	2.5	GY / BK	4369	V	—
30	2.5	BU	47	I	(Z82/ 8S3) - JL1	Trailer Auxiliary Control	30	2	BU	47	VII	(Z82/ 8S3) - JL1
31	0.5	GY	1198	II	QT6	Endgate Release Switch Analog Signal Interior	31	0.35	GY	1198	VI	QT6
32	0.75	YE / BK	7730	II	QT5	Major Endgate Motor Low Reference	32	0.75	YE / BK	7730	VI	QT5
33	0.5	WH	1612	II	—	Left Front Brake Pad Wear Sensor 3 Signal	33	0.5	WH	1612	VI	—
34	0.5	GY / BU	7762	II	UF2	Cargo Lamp Control	34	0.5	GY / BU	7762	VI	UF2
35	0.5	BU	2500	II	—	High Speed GMLAN Serial Data [+] 1	35	0.5	BU	2500	VI	—
36	0.5	WH	2501	II	—	High Speed GMLAN Serial Data [-] 1	36	0.5	WH	2501	VI	—
37	0.5	YE / BU	7295	II	QK2	Left Minor Endgate Ajar Signal	37	0.35	YE / BU	7295	VI	QK2
38	0.5	GN / BU	2733	II	—	Electronic Brake Control Module LIN Bus 2	38	0.35	GN / BU	2733	VI	—
39	0.5	WH	6106	II	—	High Speed GMLAN Serial Data [-] 2	39	0.5	WH	6106	VI	—

X140 Chassis Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
40	0.5	YE / BK	5356	II	—	Left Tail Lamp Outage Detection Signal	40	0.35	YE / BK	5356	VI	—
41	0.5	BU / YE	6105	II	—	High Speed GMLAN Serial Data [+] 2	41	0.5	BU / YE	6105	VI	—
42	0.5	WH	6106	II	—	High Speed GMLAN Serial Data [-] 2	42	0.5	WH	6106	VI	—
43	5	GY	4368	IV	—	Right Park Brake Motor Low Reference	43	2.5	GY	4368	V	—
44	0.75	GN / BK	2738	II	BOP	Virtual Key Module LIN Bus 1	44	0.75	GN / BK	2738	VI	BOP
45	0.5	BK / GY	2379	II	UD5/ UD7	Object Sensor Low Reference	45	0.5	BK / GY	2379	VI	UD5/ UD7
46	0.5	YE / WH	2377	II	UD5/ UD7	Right Rear Middle Parking Assist Sensor Signal	46	0.5	YE / WH	2377	VI	UD5/ UD7
47	0.5	YE / VT	2378	II	UD5/ UD7	Right Rear Outer Parking Assist Sensor Signal	47	0.5	YE / VT	2378	VI	UD5/ UD7
48	0.5	GY	1761	II	UKC	Right Side Object Detection LED Control	48	0.35	GY	1761	VI	UKC
49	0.5	BN	7754	II	KI4/ KI5	AC Power Outlet Enable Signal	49	0.5	BN	7754	VI	KI4/ KI5
50	0.5	VT / YE	5357	II	—	Right Tail Lamp Outage Detection Signal	50	0.35	VT / YE	5357	VI	—
51	0.5	WH / BN	7296	II	QK2	Right Minor Endgate Ajar Signal	51	0.35	WH / BN	7296	VI	QK2
52	0.5	YE	2375	II	UD5/ UD7	Left Rear Outer Parking Assist Sensor Signal	52	0.5	YE	2375	VI	UD5/ UD7
53	0.5	BU / YE	6105	II	—	High Speed GMLAN Serial Data [+] 2	53	0.5	BU / YE	6105	VI	—
54	1	WH / BK	2223	III	JL1	Trailer Brake Apply Signal	54	0.75	WH / BK	2223	VI	JL1
55	—	—	—	—	—	Battery Positive Voltage	55	4	RD / YE	442	V	—

X143 DEF Jumper Harness to Chassis Harness (LM2)

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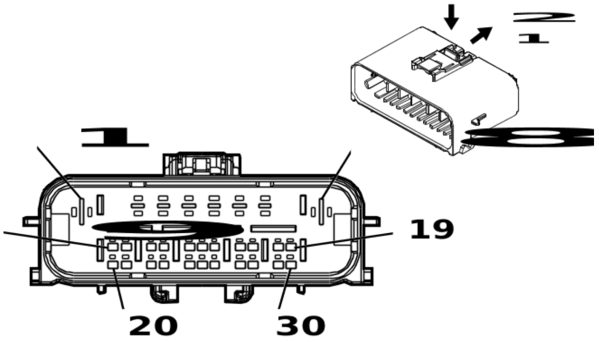


4817393

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 30 <p01>-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 2301461-7
Service Connector: 19371177
Description: 30 <p01>-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	13575376	J-35616-43 (RD)	J-38125-557
III	13578827	J-35616-5 (PU)	J-38125-36
IV	19330704	J-35616-13 (BU)	J-38125-215A

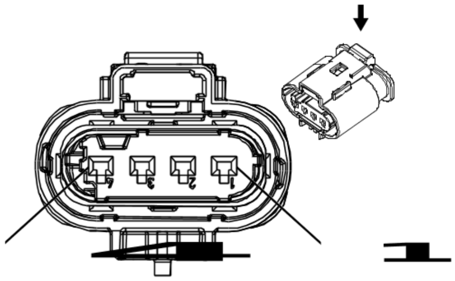
X143 DEF Jumper Harness to Chassis Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BU	3921	I	—	Diesel Exhaust Fluid Heater Control 1	1	2.5	BU	3921	II	—
2	1	RD / WH	3440	I	—	Battery Positive Voltage	2	1	RD / WH	3440	III	—
7	0.75	BK / WH	1651	I	—	Signal Ground	7	0.75	BK / WH	1651	III	—
8	2.5	BK / WH	1651	I	—	Signal Ground	8	2.5	BK / WH	1651	II	—
11	0.5	BU / BN	4498	I	—	High Speed GMLAN Serial Data [+] 7	11	0.5	BU / BN	4498	IV	—
12	0.5	WH	4499	I	—	High Speed GMLAN Serial Data [-] 7	12	0.5	WH	4499	IV	—
14	0.5	VT / GN	4320	I	—	Powertrain Sensor Bus Enable	14	0.5	VT / GN	4320	IV	—
15	0.5	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	15	0.5	VT / YE	5985	IV	—

X143 DEF Jumper Harness to Chassis Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	16	0.5	BU	2500	IV	—
17	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	17	0.5	WH	2501	IV	—
22	0.5	BU / BN	4498	I	—	High Speed GMLAN Serial Data [+] 7	22	0.5	BU / BN	4498	IV	—
23	0.5	WH	4499	I	—	High Speed GMLAN Serial Data [-] 7	23	0.5	WH	4499	IV	—
25	0.5	VT / GN	439	I	—	Run/Crank Ignition 1 Voltage	25	0.5	VT / GN	439	IV	—
27	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	27	0.5	BU	2500	IV	—
28	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	28	0.5	WH	2501	IV	—

X153 Engine Harness to Engine Coolant Temperature Sensor Harness (LM2)



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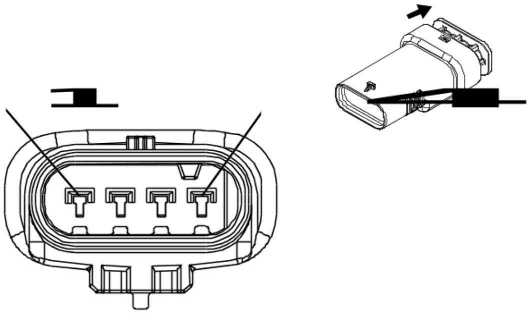


4560843

Connector Part Information

Harness Type: Engine

OEM Connector: 10010346

Service Connector: 13587299

Description: 4 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor

OEM Connector: 10013906

Service Connector: Service by Harness - See Part Catalog

Description: 4 <p01>-Way M 1.2 Multilock Series, Sealed(GY)

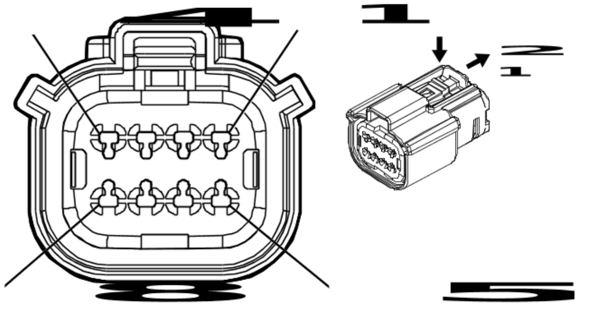
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

X153 Engine Harness to Engine Coolant Temperature Sensor Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY / VT	2404	I	—	Engine Block Coolant Temperature Signal	1	0.5	GY / VT	2404	II	—
2	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	2	0.5	BK / GN	580	II	—
3	0.5	VT	2988	I	—	Engine Outlet Coolant Temperature Signal	3	0.5	VT	2988	II	—
4	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	4	0.5	BK / GY	626	II	—

X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/L84/L87/LV3)



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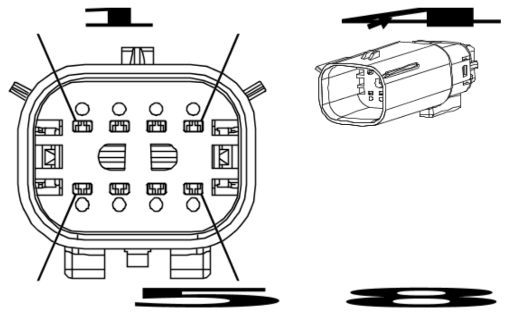


2667653

Connector Part Information

Harness Type: Engine
OEM Connector: 33472-4877
Service Connector: 84928314
Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

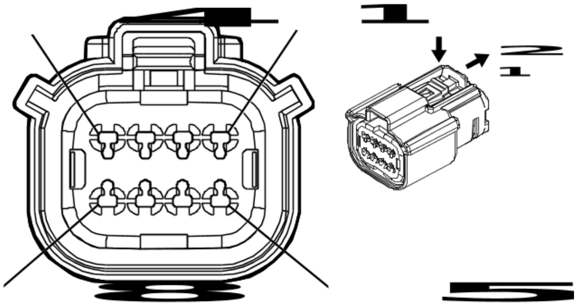
X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY / BU	5300	I	—	Intake Camshaft Position Sensor 1 Voltage Reference	1	0.5	GY / BU	5300	II	—
2	0.5	BK / GN	5301	I	—	Intake Camshaft Position Sensor Low Reference 1	2	0.5	BK / GN	5301	II	—
3	0.5	YE / VT	5275	I	—	Intake Camshaft Position Sensor 1	3	0.5	YE / VT	5275	II	—
4	0.5	BU	179	I	—	Engine Oil Pump Control	4	0.5	BU	179	II	—
5	0.5	VT / BN	5284	I	—	Intake Camshaft Position Actuator Solenoid Valve 1	5	0.5	VT / BN	5284	II	—
6	0.5	BK / BN	6753	I	—	Camshaft Position Actuator Solenoid Valve W Low Reference	6	0.5	BK / BN	6753	II	—

X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/L84/L87/LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5 0.75	VT / BU VT / BU	5293 5293	I I	L82/ L84/ L87 LV3	Powertrain Main Relay Fused Supply Voltage 4 Powertrain Main Relay Fused Supply Voltage 4	7	0.5 0.75	VT / BU VT / BU	5293 5293	II II	L82/ L84/ L87 LV3
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X155 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L84/L87)



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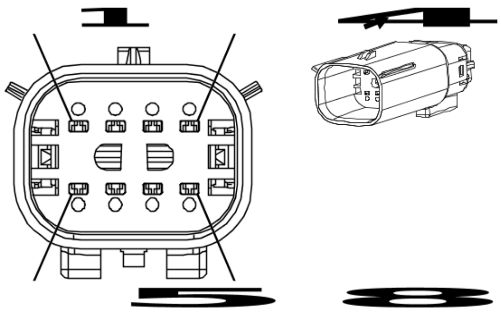


2667653

Connector Part Information

Harness Type: Engine

OEM Connector: 33472-4806

Service Connector: 84928314

Description: 8 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve - Cylinder Jumper

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 8 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

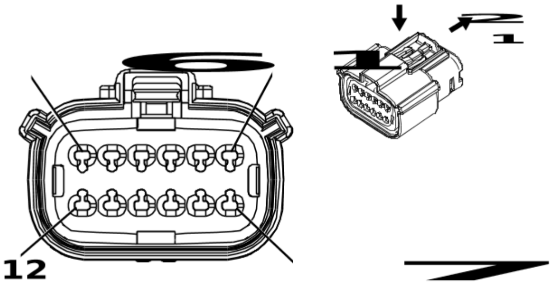
X155 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / GN	2492	I	—	Cylinder Shutoff Solenoid Enable Signal 2	1	0.5	WH / GN	2492	II	—
2	0.5	GN	5492	I	—	Cylinder Deactivation Solenoid Valve Control 2	2	0.5	GN	5492	II	—
3	0.5	YE / GY	2493	I	—	Cylinder Shutoff Solenoid Enable Signal 3	3	0.5	YE / GY	2493	II	—
4	0.5	GY	5493	I	—	Cylinder Deactivation Solenoid Valve Control 3	4	0.5	GY	5493	II	—
5	0.5	WH / VT	2495	I	—	Cylinder Shutoff Solenoid Enable Signal 5	5	0.5	WH / VT	2495	II	—

X155 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L84/ L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	VT	5495	I	—	Cylinder Deactivation Solenoid Valve Control 5	6	0.5	VT	5495	II	—
7	0.5	WH / YE	2498	I	—	Cylinder Shutoff Solenoid Enable Signal 8	7	0.5	WH / YE	2498	II	—
8	0.5	YE	5498	I	—	Cylinder Deactivation Solenoid Valve Control 8	8	0.5	YE	5498	II	—

X156 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L82/L84/L87)



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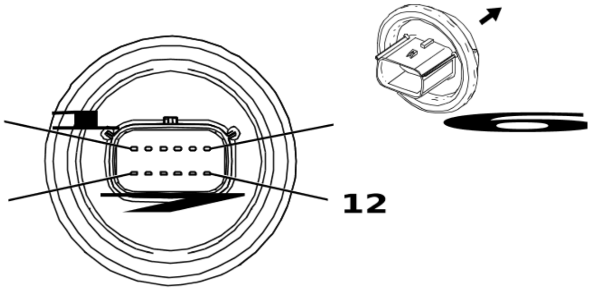


3238775

Connector Part Information

Harness Type: Engine
OEM Connector: 33472-1266
Service Connector: 19352907
Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve - Cylinder Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	Not required	No Tool Required	No Tool Required

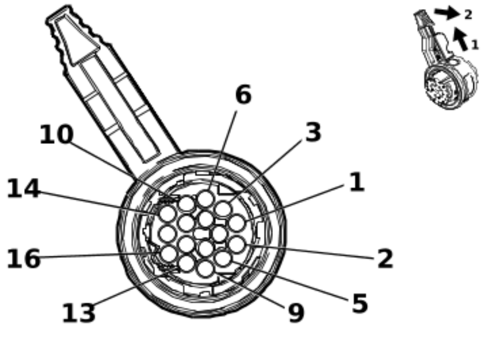
X156 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L82/L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / BU	2491	I	- YK9	Cylinder Shutoff Solenoid Enable Signal 1	1	0.5	WH / BU	2491	II	- YK9
2	0.5	BU	5491	I	- YK9	Cylinder Deactivation Solenoid Valve Control 1	2	0.5	BU	5491	II	- YK9
3	0.5	YE / GN	2494	I	- YK9	Cylinder Shutoff Solenoid Enable Signal 4	3	0.5	YE / GN	2494	II	- YK9
4	0.5	YE / BU	5494	I	- YK9	Cylinder Deactivation Solenoid Valve Control 4	4	0.5	YE / BU	5494	II	- YK9
5	0.5	YE / BN	2496	I	- YK9	Cylinder Shutoff Solenoid Enable Signal 6	5	0.5	YE / BN	2496	II	- YK9

X156 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L82/L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	BN	5496	I	- YK9	Cylinder Deactivation Solenoid Valve Control 6	6	0.5	BN	5496	II	- YK9
7	0.5	GN / GY	2497	I	- YK9	Cylinder Shutoff Solenoid Enable Signal 7	7	0.5	GN / GY	2497	II	- YK9
8	0.5	WH	5497	I	- YK9	Cylinder Deactivation Solenoid Valve Control 7	8	0.5	WH	5497	II	- YK9
9	0.5	BU	410	I	—	Engine Coolant Temperature Sensor Signal	9	0.5	BU	410	II	—
10	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	10	0.5	BK / YE	548	II	—
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—

X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Solenoid Harness ((L82/L84/L87)-YK9)



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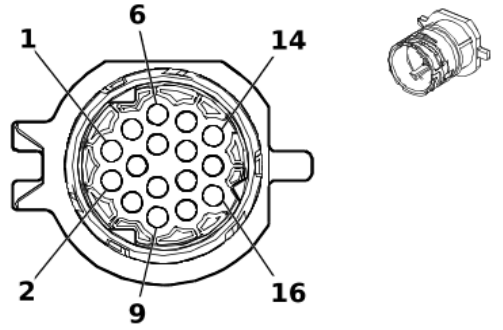


5575849

Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13257299
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way F

Connector Part Information

Harness Type: Active Fuel Management Solenoid
OEM Connector: 12670796
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way M 1.5 LKS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

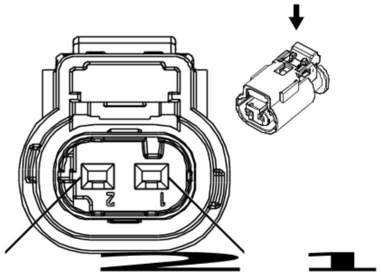
X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Solenoid Harness ((L82/L84/L87)-YK9)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / GN	2492	I	L84/ L87	Cylinder Shutoff Solenoid Enable Signal 2	1	0.5	WH / GN	2492	II	L84/ L87
2	0.5	GN	5492	I	L84/ L87	Cylinder Deactivation Solenoid Valve Control 2	2	0.5	GN	5492	II	L84/ L87
3	0.5	YE / GY	2493	I	L84/ L87	Cylinder Shutoff Solenoid Enable Signal 3	3	0.5	YE / GY	2493	II	L84/ L87
4	0.5	GY	5493	I	L84/ L87	Cylinder Deactivation Solenoid Valve Control 3	4	0.5	GY	5493	II	L84/ L87
5	0.5	WH / VT	2495	I	L84/ L87	Cylinder Shutoff Solenoid Enable Signal 5	5	0.5	WH / VT	2495	II	L84/ L87
6	0.5	VT	5495	I	L84/ L87	Cylinder Deactivation Solenoid Valve Control 5	6	0.5	VT	5495	II	L84/ L87

X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Solenoid Harness ((L82/L84/L87)-YK9) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	WH / YE	2498	I	L84/ L87	Cylinder Shutoff Solenoid Enable Signal 8	7	0.5	WH / YE	2498	II	L84/ L87
8	0.5	YE	5498	I	L84/ L87	Cylinder Deactivation Solenoid Valve Control 8	8	0.5	YE	5498	II	L84/ L87
9	0.5	WH / BU	2491	I	—	Cylinder Shutoff Solenoid Enable Signal 1	9	0.5	WH / BU	2491	II	—
10	0.5	BU	5491	I	—	Cylinder Deactivation Solenoid Valve Control 1	10	0.5	BU	5491	II	—
11	0.5	YE / GN	2494	I	—	Cylinder Shutoff Solenoid Enable Signal 4	11	0.5	YE / GN	2494	II	—
12	0.5	YE / BU	5494	I	—	Cylinder Deactivation Solenoid Valve Control 4	12	0.5	YE / BU	5494	II	—
13	0.5	YE / BN	2496	I	—	Cylinder Shutoff Solenoid Enable Signal 6	13	0.5	YE / BN	2496	II	—
14	0.5	BN	5496	I	—	Cylinder Deactivation Solenoid Valve Control 6	14	0.5	BN	5496	II	—
15	0.5	GN / GY	2497	I	—	Cylinder Shutoff Solenoid Enable Signal 7	15	0.5	GN / GY	2497	II	—
16	0.5	WH	5497	I	—	Cylinder Deactivation Solenoid Valve Control 7	16	0.5	WH	5497	II	—

X158 Engine Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)



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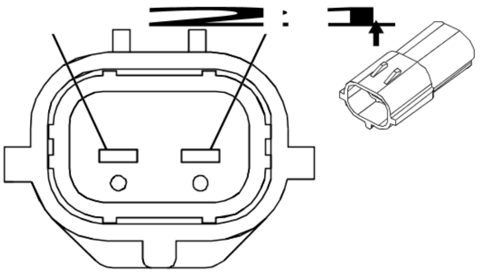


2684367

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Oil Control Solenoid Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M (BK)

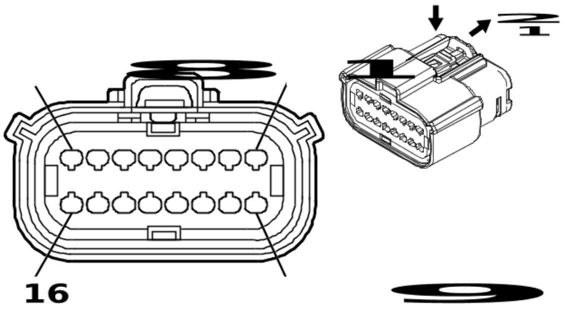
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

X158 Engine Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	YE / BN	106	I	—	Oil Pump Motor Control	1	0.5	YE / BN	106	II	—
2	0.5	BU	179	I	—	Engine Oil Pump Control	2	0.5	BU	179	II	—

X160 Engine Harness to Fuel Injector Harness (L3B)



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4574233

Connector Part Information

Harness Type: Engine
OEM Connector: 33386201
Service Connector: 19354087
Description: 16 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300432	J-35616-14 (GN)	J-38125-217
II	Not required	No Tool Required	No Tool Required

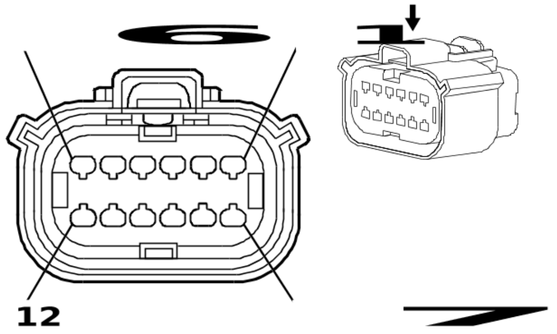
X160 Engine Harness to Fuel Injector Harness (L3B)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT / GY	496	I	—	Knock Sensor 1 Signal	1	0.5	VT / GY	496	II	—
2	0.75	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	2	0.75	BN	4801	II	—
3	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	3	0.5	WH / RD	480	II	—
4	0.75	GY / BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	4	0.75	GY / BU	4804	II	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.75	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	6	0.75	GN	4803	II	—
7	0.75	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	7	0.75	BU	4802	II	—

X160 Engine Harness to Fuel Injector Harness (L3B) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	WH / GY	1876	I	—	Knock Sensor 2 Signal	8	0.5	WH / GY	1876	II	—
9	0.5	BK / YE	1716	I	—	Knock Sensor Low Reference 1	9	0.5	BK / YE	1716	II	—
10	0.75	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	10	0.75	BN / WH	4901	II	—
11	0.5	BU / WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	BU / WH	2918	II	—
12	0.5	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	12	0.5	BK / GN	580	II	—
13	0.75	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	13	0.75	BU / WH	4904	II	—
14	0.75	GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	14	0.75	GN / GY	4903	II	—
15	0.75	BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	15	0.75	BU / GY	4902	II	—
16	0.5	BK / GY	2303	I	—	Knock Sensor Low Reference 2	16	0.5	BK / GY	2303	II	—

X160 Engine Harness to Fuel Injector Harness (L82/L84/L87)



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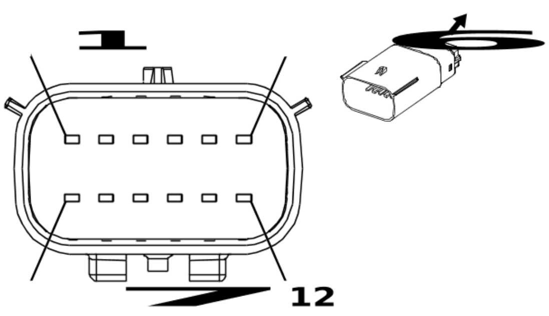


2687960

Connector Part Information

Harness Type: Engine
OEM Connector: 33472-1216
Service Connector: 19352907
Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	Not required	No Tool Required	No Tool Required

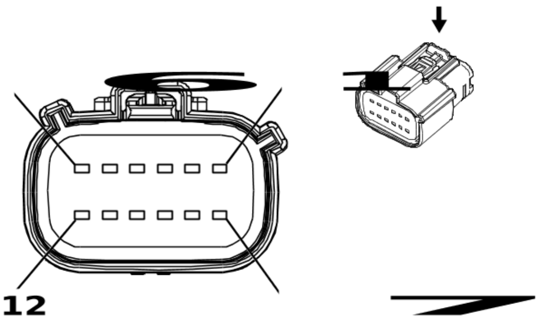
X160 Engine Harness to Fuel Injector Harness (L82/L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	1	0.75	BN / WH	4901	II	—
2	0.75	GN / BK	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	2	0.75	GN / BK	4903	II	—
3	0.75	GN / WH	4905	I	—	Direct Fuel Injector High Voltage Supply Cylinder 5	3	0.75	GN / WH	4905	II	—
4	0.75	WH / YE	4907	I	—	Direct Fuel Injector High Voltage Supply Cylinder 7	4	0.75	WH / YE	4907	II	—
5	0.75	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	5	0.75	BN	4801	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X160 Engine Harness to Fuel Injector Harness (L82/L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	7	0.75	GN	4803	II	—
8	0.75	WH / GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	8	0.75	WH / GN	4805	II	—
9	0.75	YE / GY	4807	I	—	Direct Fuel Injector High Voltage Control Cylinder 7	9	0.75	YE / GY	4807	II	—
10	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	10	0.5	WH / RD	480	II	—
11	0.5	BU / WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	BU / WH	2918	II	—
12	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	12	0.5	BK / YE	548	II	—

X160 Engine Harness to Fuel Injector Harness (LM2)



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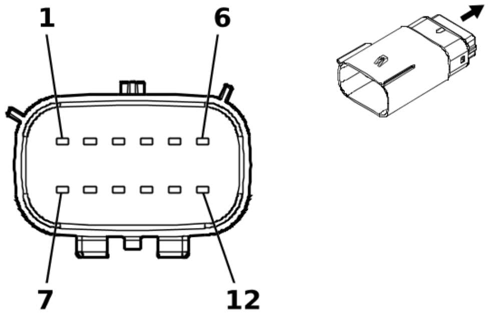


5187933

Connector Part Information

Harness Type: Engine

OEM Connector: 33472-1259

Service Connector: 19333239

Description: 12 <p01>-Way F 1.5 MX Series, Sealed(D-GY)

Connector Part Information

Harness Type: Fuel Injector

OEM Connector: 33482-6261

Service Connector: Service by Harness - See Part Catalog

Description: 12 <p01>-Way M 1.5 MX Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

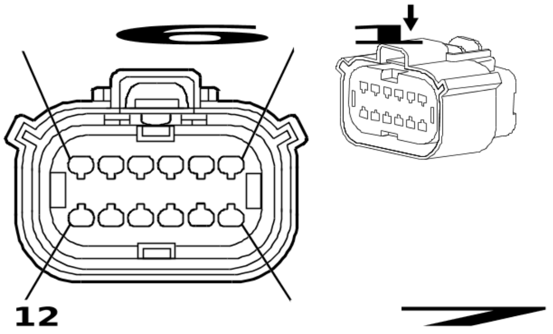
X160 Engine Harness to Fuel Injector Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	1	1.5	BN / WH	4901	II	—
2	1.5	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	2	1.5	BN	4801	II	—
3	1.5	BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	3	1.5	BU / GY	4902	II	—
4	1.5	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	4	1.5	BU	4802	II	—
5	1.5	GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	5	1.5	GN / GY	4903	II	—

X160 Engine Harness to Fuel Injector Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	1.5	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	6	1.5	GN	4803	II	—
7	1.5	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	7	1.5	BU / WH	4904	II	—
8	1.5	GY / BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	1.5	GY / BU	4804	II	—
9	1.5	GN / WH	4905	I	—	Direct Fuel Injector High Voltage Supply Cylinder 5	9	1.5	GN / WH	4905	II	—
10	1.5	WH / GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	10	1.5	WH / GN	4805	II	—
11	1.5	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	11	1.5	VT / GY	4906	II	—
12	1.5	VT / GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	12	1.5	VT / GN	4806	II	—

X160 Engine Harness to Fuel Injector Harness (LV3)



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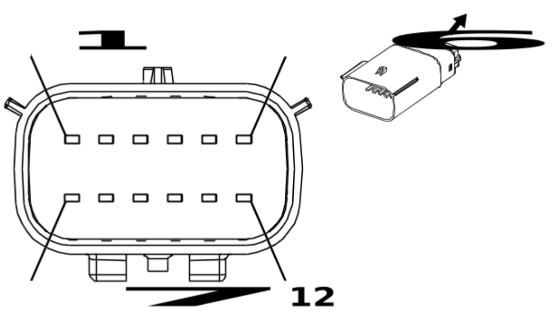


2687960

Connector Part Information

Harness Type: Engine
OEM Connector: 33472-1236
Service Connector: 19352907
Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	Not required	No Tool Required	No Tool Required

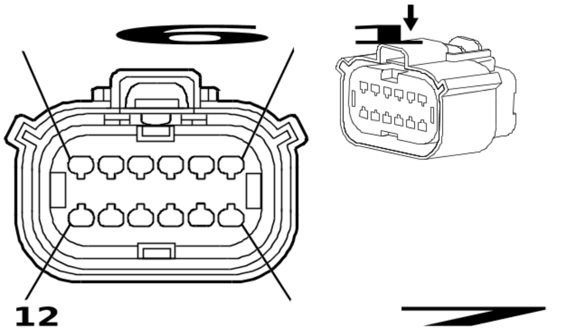
X160 Engine Harness to Fuel Injector Harness (LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	2	0.75	BN / WH	4901	II	—
3	0.75	GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	3	0.75	GN / GY	4903	II	—
4	0.75	GN / WH	4905	I	—	Direct Fuel Injector High Voltage Supply Cylinder 5	4	0.75	GN / WH	4905	II	—
5	0.75	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	5	0.75	BN	4801	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.75	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	8	0.75	GN	4803	II	—

X160 Engine Harness to Fuel Injector Harness (LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.75	WH / GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	9	0.75	WH / GN	4805	II	—
10	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	10	0.5	WH / RD	480	II	—
11	0.5	BU / WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	BU / WH	2918	II	—
12	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	12	0.5	BK / YE	548	II	—

X161 Engine Harness to Fuel Injector Harness (L82/L84/L87)



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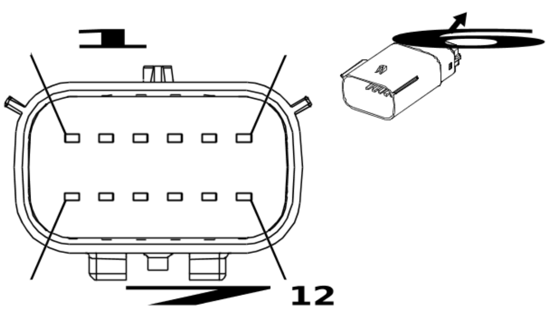


2687960

Connector Part Information

Harness Type: Engine
OEM Connector: 33472-1226
Service Connector: 19352907
Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	Not required	No Tool Required	No Tool Required

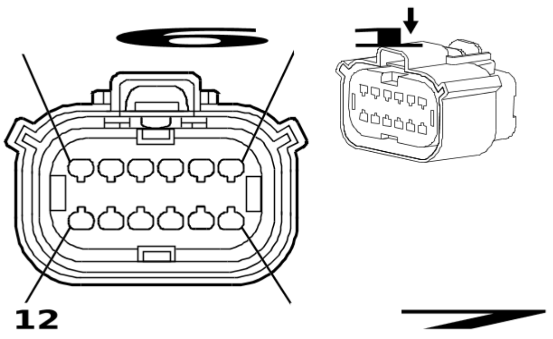
X161 Engine Harness to Fuel Injector Harness (L82/L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN / GN	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	1	0.75	BN / GN	4902	II	—
2	0.75	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	2	0.75	BU / WH	4904	II	—
3	0.75	VT	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	3	0.75	VT	4906	II	—
4	0.75	WH / GN	4908	I	—	Direct Fuel Injector High Voltage Supply Cylinder 8	4	0.75	WH / GN	4908	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	5	0.75	BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

X161 Engine Harness to Fuel Injector Harness (L82/L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	GY / BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	0.75	GY / BU	4804	II	—
9	0.75	GN / VT	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	9	0.75	GN / VT	4806	II	—
10	0.75	GY	4808	I	—	Direct Fuel Injector High Voltage Control Cylinder 8	10	0.75	GY	4808	II	—
11	0.75	VT / BK	7300	I	—	High Pressure Fuel Pump Low Control	11	0.75	VT / BK	7300	II	—
12	0.75	YE	7301	I	—	High Pressure Fuel Pump High Control	12	0.75	YE	7301	II	—

X161 Engine Harness to Fuel Injector Harness (LV3)



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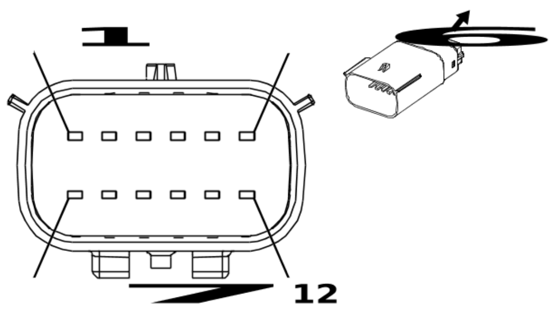


2687960

Connector Part Information

Harness Type: Engine
OEM Connector: 33472-1246
Service Connector: 19352907
Description: 12 <p01>-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-14 (GN)	J-38125-217
II	Not required	No Tool Required	No Tool Required

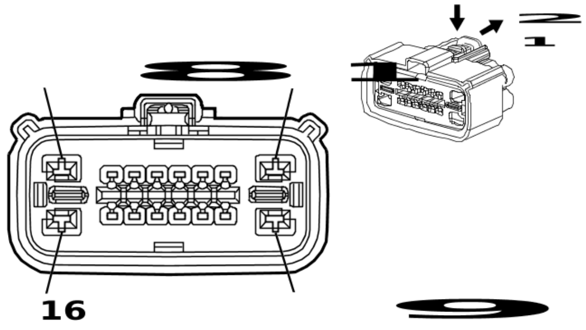
X161 Engine Harness to Fuel Injector Harness (LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	2	0.75	BU / GY	4902	II	—
3	0.75	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	3	0.75	BU / WH	4904	II	—
4	0.75	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	4	0.75	VT / GY	4906	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	5	0.75	BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.75	GY / BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	0.75	GY / BU	4804	II	—

X161 Engine Harness to Fuel Injector Harness (LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.75	VT / GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	9	0.75	VT / GN	4806	II	—
10	0.75	VT / BK	7300	I	—	High Pressure Fuel Pump Low Control	10	0.75	VT / BK	7300	II	—
11	0.75	YE	7301	I	—	High Pressure Fuel Pump High Control	11	0.75	YE	7301	II	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—

X171 Engine Harness to Chassis Harness (L3B/LM2)



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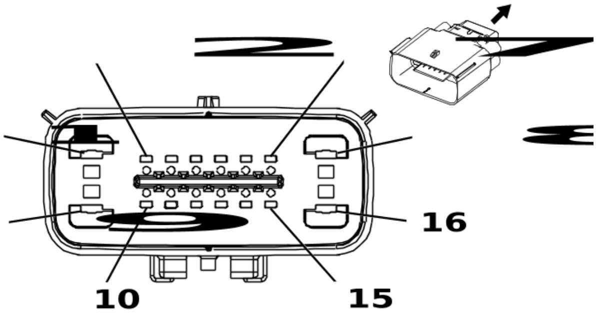


2373686

Connector Part Information

Harness Type: Engine
OEM Connector: 35208183
Service Connector: 19352906
Description: 16 <p01>-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 34986-2145
Service Connector: 19331031
Description: 16 <p01>-Way M 1.5, 2.8 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579751	J-35616-35 (VT)	J-38125-12A
II	19300432	J-35616-14 (GN)	J-38125-217
III	19300432	J-35616-2A (GY)	J-38125-217
IV	19119842	J-35616-14 (GN)	J-38125-12A
V	19119842	J-35616-14 (GN)	J-38125-217
VI	19366658	J-35616-5 (PU)	J-38125-12A

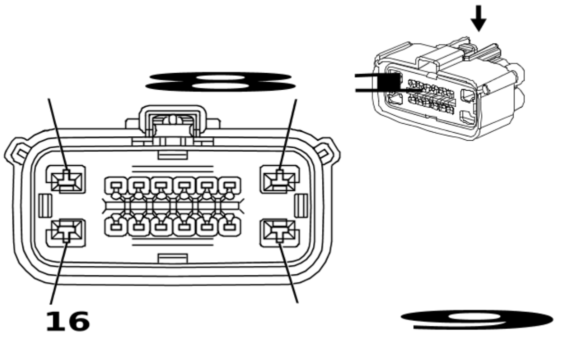
X171 Engine Harness to Chassis Harness (L3B/LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	VT / GN	355	I	LM2	Fuel Filter Heater Control Circuit	1	2.5	VT / GN	355	VI	LM2
2	0.5	VT / YE	5985	II	—	Accessory Wake-Up Serial Data	2	0.5	VT / YE	5985	V	—
3	0.5	BU / BN	4498	II	—	High Speed GMLAN Serial Data [+] 7	3	0.5	BU / BN	4498	V	—
4	0.5	BU / WH	7446	II	—	Fuel Pressure Sensor Signal	4	0.5	BU / WH	7446	V	—
5	0.5	BK / GN	580	II	—	Engine Control Sensors Low Reference 2	5	0.5	BK / YE	7447	V	—
6	0.5	WH	1579	II	FHS	Fuel Temperature/Composition Signal	6	0.5	WH	1579	V	FHS

X171 Engine Harness to Chassis Harness (L3B/LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	VT / GN	4320	II	—	Powertrain Sensor Bus Enable	7	0.5	VT / GN	4320	V	—
8	0.5	BK / WH	451	I	FHS	Signal Ground	8	0.5	BK / WH	451	IV	FHS
9	1.5	VT / BU	3674	I	LM2	NOx Sensor 1 Control	9	1.5	VT / BU	3674	VI	LM2
10	0.5	VT / BU	5294	II	FHS	Powertrain Main Relay Fused Supply Voltage 5	10	0.5	VT / BU	5294	V	FHS
11	0.5	WH	4499	II	—	High Speed GMLAN Serial Data [-] 7	11	0.5	WH	4499	V	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	BU / RD	460	II	—	Engine Control Sensors 5 Volt Reference 1	13	0.5	BN / RD	7445	V	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.75 0.5	GN / GY GN / GY	465 465	III II	L3B LM2	Fuel Pump Primary Relay Control Fuel Pump Primary Relay Control	15	0.5	GN / GY	465	V	—
16	2.5	BU	3921	I	LM2	Diesel Exhaust Fluid Heater Control 1	16	2.5	BU	3921	VI	LM2

X171 Engine Harness to Chassis Harness (L82/L84/L87/LV3)



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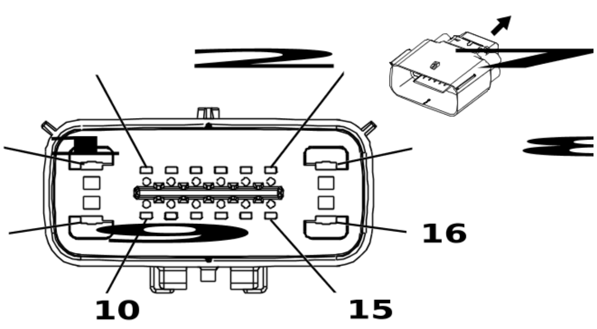


2373686

Connector Part Information

Harness Type: Engine

OEM Connector: 34985-1606

Service Connector: 19352906

Description: 16 <p01>-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis

OEM Connector: 34986-2145

Service Connector: 19331031

Description: 16 <p01>-Way M 1.5, 2.8 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579751	J-35616-35 (VT)	J-38125-12A
II	19300432	J-35616-14 (GN)	J-38125-217
III	19119842	J-35616-14 (GN)	J-38125-12A

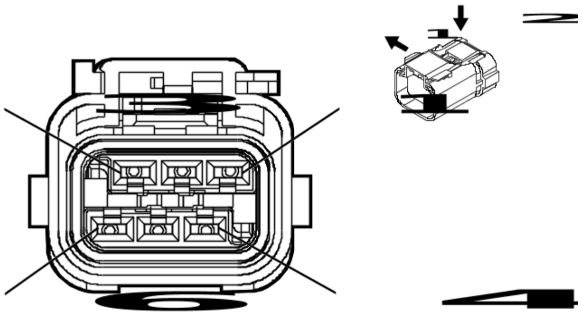
X171 Engine Harness to Chassis Harness (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	VT / YE	5985	II	—	Accessory Wake-Up Serial Data	2	—	—	—	—	—
3	0.5	BU / BN	4498	II	—	High Speed GMLAN Serial Data [+] 7	3	0.5	BU / BN	4498	III	—
4	0.5	BU / WH	7446	II	—	Fuel Pressure Sensor Signal	4	0.5	BU / WH	7446	III	—
5	0.5	BK / GN	580	II	—	Engine Control Sensors Low Reference 2	5	0.5	BK / YE	7447	III	—
6	0.5	WH	1579	II	—	Fuel Temperature/Composition Signal	6	0.5	WH	1579	III	—
7	0.5	VT / GN	4320	II	—	Powertrain Sensor Bus Enable	7	0.5	VT / GN	4320	III	—
8	1	BK / WH	451	I	—	Signal Ground	8	0.5	BK / WH	451	III	—

X171 Engine Harness to Chassis Harness (L82/L84/L87/LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	VT / BU	5294	II	—	Powertrain Main Relay Fused Supply Voltage 5	10	0.5	VT / BU	5294	III	—
11	0.5	WH	4499	II	—	High Speed GMLAN Serial Data [-] 7	11	0.5	WH	4499	III	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	BU / RD	460	II	—	Engine Control Sensors 5 Volt Reference 1	13	0.5	BN / RD	7445	III	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.5	GN / GY	465	II	—	Fuel Pump Primary Relay Control	15	0.5	GN / GY	465	III	—
16	—	—	—	—	—	Not Occupied	16	—	—	—	—	—

X172 Engine Harness to Glow Plug Jumper Harness (LM2)



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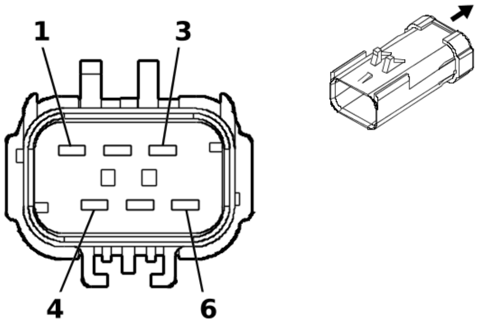


5187846

Connector Part Information

Harness Type: Engine

OEM Connector: 15419838

Service Connector: 19371212

Description: 6 <p01>-Way F 2.8 APEX Series, Sealed(BK)

Connector Part Information

Harness Type: Glow Plug Jumper

OEM Connector: 54200612

Service Connector: Service by Harness - See Part Catalog

Description: 6 <p01>-Way M 2.8 APEX Series, Sealed(BK)

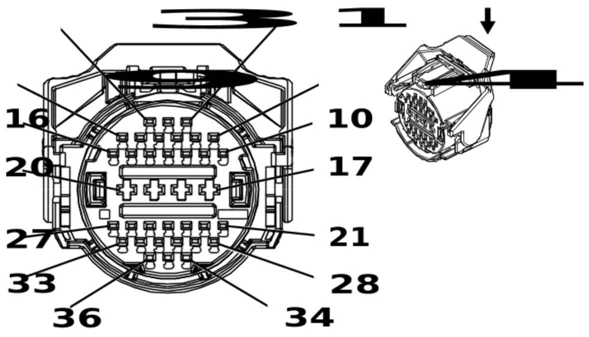
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X172 Engine Harness to Glow Plug Jumper Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	GY / BU	1581	I	—	Glow Plug 1 Control	1	2.5	GY / RD	1581	II	—
2	2.5	GY / BN	1582	I	—	Glow Plug 2 Control	2	2.5	GY / BK	1582	II	—
3	2.5	GY / GN	1583	I	—	Glow Plug 3 Control	3	2.5	GY / GN	1583	II	—
4	2.5	GY / YE	1584	I	—	Glow Plug 4 Control	4	2.5	GY / YE	1584	II	—
5	2.5	GY / WH	1585	I	—	Glow Plug 5 Control	5	2.5	GY / WH	1585	II	—
6	2.5	GY / VT	1586	I	—	Glow Plug 6 Control	6	2.5	GY	1586	II	—

X175 Engine Harness to Transmission Harness (MQE)



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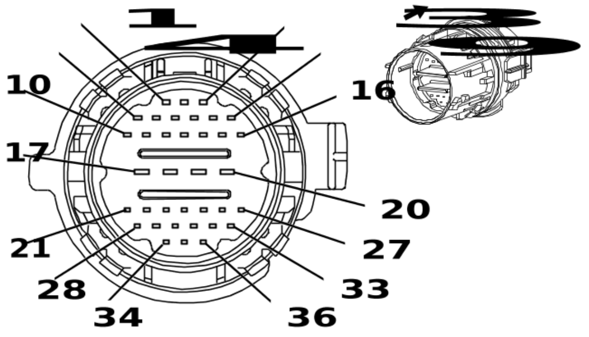


3977661

Connector Part Information

Harness Type: Engine

OEM Connector: 15532799

Service Connector: 19332681

Description: 36 <p01>-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Transmission

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 36 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-557
II	19300445	J-35616-16 (LT GN)	J-38125-11A
III	Not required	J-35616-17 (LT GN)	No Tool Required

X175 Engine Harness to Transmission Harness (MQE)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN / WH	6380	II	—	Torque Converter Clutch Enable Solenoid Valve A Control	1	0.5	GN / WH	6380	III	—
2	0.5	GN / GY	6387	II	—	Transmission High Side Driver 1 Control	2	0.5	GN / GY	6387	III	—
3	0.5	VT / WH	422	II	—	Torque Converter Clutch Solenoid Valve Control	3	0.5	VT / WH	422	III	—
4	0.5	GN / WH	1530	II	—	Transmission Line Pressure Control Solenoid Valve Control	4	0.5	GN / WH	1530	III	—
5	0.5	BN	6400	II	—	Clutch Solenoid Valve A Control	5	0.5	BN	6400	III	—
6	0.5	BU	6401	II	—	Clutch Solenoid Valve B Control	6	0.5	BU	6401	III	—

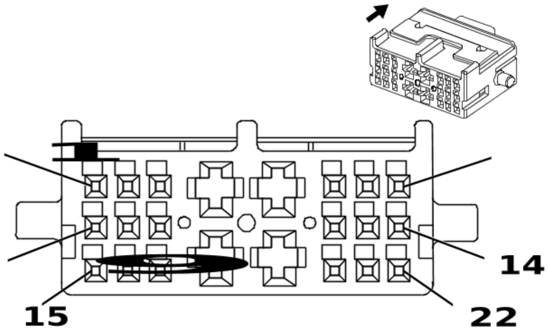
X175 Engine Harness to Transmission Harness (MQE) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	YE / BN	6210	II	—	Torque Converter Clutch Enable Solenoid Valve B Control	7	0.5	YE / BN	6210	III	—
8	0.5	WH / GY	4578	II	—	Surge Accumulator Solenoid Valve Low Side Control	8	0.5	WH / GY	4578	III	—
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	GY	6402	II	—	Clutch Solenoid Valve C Control	10	0.5	GY	6402	III	—
11	0.5	BK / BN	586	II	—	Transmission Fluid Temperature Sensor Low Reference	11	0.5	BK / BN	586	III	—
12	0.5	BN / WH	585	II	—	Transmission Fluid Temperature Sensor Signal	12	0.5	BN / WH	585	III	—
13	0.5	WH	4508	II	—	Transmission Clutch G Control	13	0.5	WH	4508	III	—
14	0.5	WH / BU	4507	II	—	Transmission Clutch H Control	14	0.5	WH / BU	4507	III	—
15 - 17	—	—	—	—	—	Not Occupied	15 - 17	—	—	—	—	—
18	0.5	GN / GY	6387	I	—	Transmission High Side Driver 1 Control	18	—	—	—	—	—
19	0.5	GY / BN	6388	I	—	Transmission High Side Driver 2 Control	19	—	—	—	—	—
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.5	GN / YE	3337	II	—	Transmission Internal Mode Switch Mode Control Y	21	0.5	GN / YE	3337	III	—
22	0.5	BU / WH	3338	II	—	Transmission Internal Mode Switch Mode Control X	22	0.5	BU / WH	3338	III	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.5	GY / BU	6358	II	—	Output Speed Signal	24	0.5	GY / BU	6358	III	—

X175 Engine Harness to Transmission Harness (MQE) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.5	YE / GN	4170	II	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	25	0.5	YE / GN	4170	III	—
26	0.5	BN / WH	6254	II	—	Transmission Input Speed Sensor Signal	26	0.5	BN / WH	6254	III	—
27	0.5	YE / BU	4171	II	—	Transmission Input Shaft Speed Sensor Circuit 9V Reference	27	0.5	YE / BU	4171	III	—
28	—	—	—	—	—	Not Occupied	28	—	—	—	—	—
29	0.5	WH / RD	480	II	—	Engine Control Vehicle Sensors 5 Volt Reference 1	29	0.5	WH / RD	480	III	—
30	0.5	BK / GY	626	II	—	Engine Control Vehicle Sensors Low Reference 1	30	0.5	BK / GY	626	III	—
31	—	—	—	—	—	Not Occupied	31	—	—	—	—	—
32	0.5	GN / VT	4510	II	—	Transmission Intermediate Speed Signal	32	0.5	GN / VT	4510	III	—
33 - 36	—	—	—	—	—	Not Occupied	33 - 36	—	—	—	—	—

X176 Transmission Case Harness to Transmission Control Harness (MQB)



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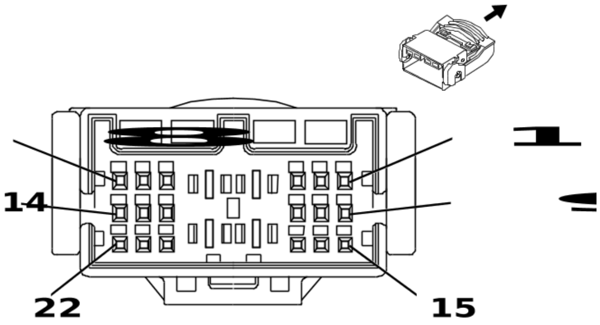


3977770

Connector Part Information

Harness Type: Transmission Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22 <p01>-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series(NA)

Connector Part Information

Harness Type: Transmission Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22 <p01>-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series(NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required
III	Not required	J-35616-16 (LT GN)	No Tool Required

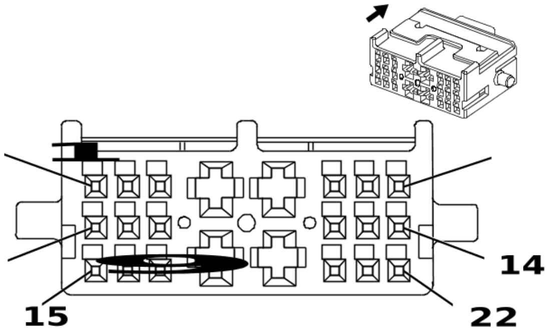
X176 Transmission Case Harness to Transmission Control Harness (MQB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT	7819	I	—	Default Disable Solenoid Control	1	0.5	BN / BU	7819	II	—
2	0.5	BN / YE	1530	I	—	Transmission Line Pressure Control Solenoid Valve Control	2	0.5	BN / YE	1530	II	—
3	0.5	YE / VT	422	I	—	Torque Converter Clutch Solenoid Valve Control	3	0.5	YE / VT	422	II	—
4	0.5	BU / GY	6387	I	—	Transmission High Side Driver 1 Control	4	0.5	BU / GY	6387	II	—
5 - 12	—	—	—	—	—	Not Occupied	5 - 12	—	—	—	—	—
13	0.5	GY / BN	586	I	—	Transmission Fluid Temperature Sensor Low Reference	13	0.5	GY / BN	586	II	—

X176 Transmission Case Harness to Transmission Control Harness (MQB) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
14	0.5	BU / GN	585	I	—	Transmission Fluid Temperature Sensor Signal	14	0.5	BU / GN	585	II	—
15	0.5	GN / BN	6404	I	—	Clutch Solenoid Valve E Control	15	0.5	GN / GN	6404	II	—
16	0.5	GY / BN	6403	I	—	Clutch Solenoid Valve D Control	16	0.5	GY / BN	6403	II	—
17	0.5	BN / WH	6402	I	—	Clutch Solenoid Valve C Control	17	0.5	BN / WH	6402	II	—
18	0.5	BN	6388	I	—	Transmission High Side Driver 2 Control	18	0.5	WH	6388	II	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	GN / WH	4509	I	—	Transmission Clutch F Control	20	0.5	GN / WH	4509	II	—
21	0.5	YE / VT	4507	I	—	Transmission Clutch H Control	21	0.5	YE / VT	4507	III	—
22	0.5	BU / GY	4508	I	—	Transmission Clutch G Control	22	0.5	BU / GY	4508	III	—

X176 Transmission Case Harness to Transmission Control Harness (MQE)



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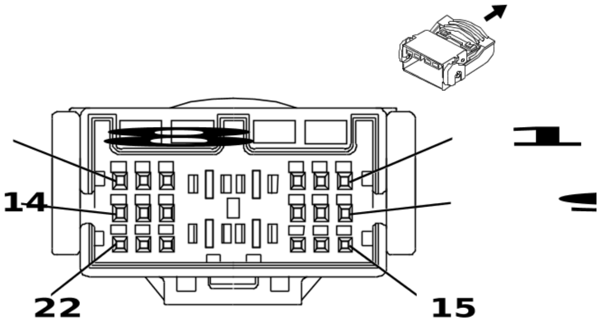


3977770

Connector Part Information

Harness Type: Transmission Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22 <p01>-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series(NA)

Connector Part Information

Harness Type: Transmission Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22 <p01>-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series(NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-64B (LT BU)	No Tool Required
III	Not required	J-35616-5 (PU)	No Tool Required
IV	Not required	J-35616-65B (LT BU)	No Tool Required

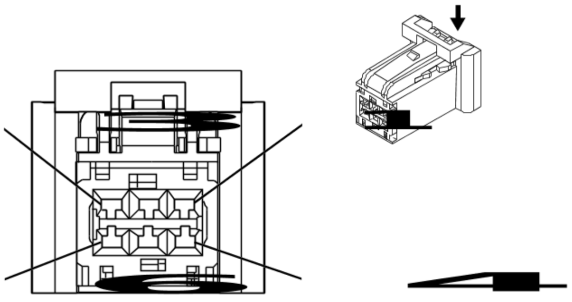
X176 Transmission Case Harness to Transmission Control Harness (MQE)

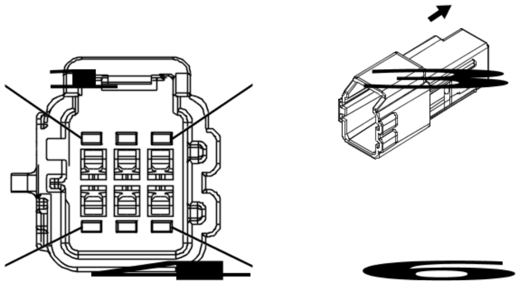
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN / WH	6380	II	—	Torque Converter Clutch Enable Solenoid Valve A Control	1	0.5	GN / WH	6380	IV	—
2	0.5	VT / WH	3338	II	—	Transmission Internal Mode Switch Mode Control X	2	0.5	VT / WH	3338	IV	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	2.5	GN / GY	6387	I	—	Transmission High Side Driver 1 Control	4	2.5	GN / GY	6387	III	—
5	0.5	YE / BU	596	I	—	5V Reference	5	0.5	YE / RD	596	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	WH / BU	4507	II	—	Transmission Clutch H Control	7	0.5	WH / BU	4507	IV	—

X176 Transmission Case Harness to Transmission Control Harness (MQE) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	GY / GN	6403	II	—	Clutch Solenoid Valve D Control	8	0.5	GY / GN	6403	IV	—
9	0.5	WH	4508	II	—	Transmission Clutch G Control	9	0.5	WH	4508	IV	—
10	0.5	YE / BN	6210	II	—	Torque Converter Clutch Enable Solenoid Valve B Control	10	0.5	YE / BN	6210	IV	—
11	0.5	WH / YE	3337	II	—	Transmission Internal Mode Switch Mode Control Y	11	0.5	WH / YE	3337	IV	—
12	0.5	WH / GY	1786	II	—	Transmission Park/Neutral Signal 1	12	—	—	—	—	—
13	0.5	GY	6402	II	—	Clutch Solenoid Valve C Control	13	0.5	GY	6402	IV	—
14	0.5	YE / BN	6404	II	—	Clutch Solenoid Valve E Control	14	0.5	YE / BN	6404	IV	—
15	0.5	BN / WH	585	II	—	Transmission Fluid Temperature Sensor Signal	15	0.5	BK / BN	585	IV	—
16	0.5	BK / BN	586	II	—	Transmission Oil Temperature Sensor Low Reference	16	0.5	BK / BN	586	IV	—
17	—	—	—	—	—	Not Occupied	17	—	—	—	—	—
18	2.5	GY / BN	6388	I	—	Transmission High Side Driver 2 Control	18	2.5	GY / BN	6388	III	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	BK / GY	3927	II	—	Transmission Internal Mode Switch Feedback Signal	20	0.5	BK / GY	3927	IV	—
21	0.5	BN	6400	II	—	Clutch Solenoid Valve A Control	21	0.5	BN	6400	IV	—
22	0.5	BU	6401	II	—	Clutch Solenoid Valve B Control	22	0.5	BU	6401	IV	—

X177 Transmission Control Extension Harness to Transmission Control Harness (MQB)





Connector Part Information

Harness Type: Transmission Control Extension
OEM Connector: 6098-8427
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 6098-8429
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way M

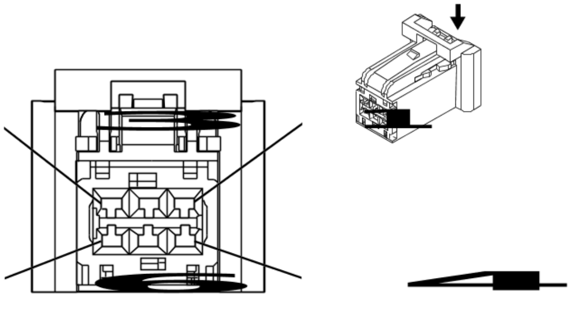
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required

X177 Transmission Control Extension Harness to Transmission Control Harness (MQB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN	6387	I	—	Transmission High Side Driver 1 Control	1	0.5	BN	6387	II	—
2	0.5	GN / OG	1530	I	—	Transmission Line Pressure Control Solenoid Valve Control	2	0.5	GN / OG	1530	II	—
3	0.5	GY / BN	422	I	—	Torque Converter Clutch Solenoid Valve Control	3	0.5	GY / BN	422	II	—
4	0.5	VT	7819	I	—	Default Disable Solenoid Control	4	0.5	VT	7819	II	—
5	0.5	WH	6388	I	—	Transmission High Side Driver 2 Control	5	0.5	WH	6388	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)



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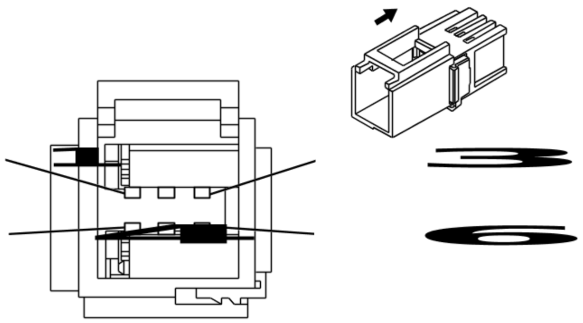


3977959

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 13960975
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.2 OCS Series(NA)

Connector Part Information

Harness Type: Speed Sensor Assembly
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way M (NA)

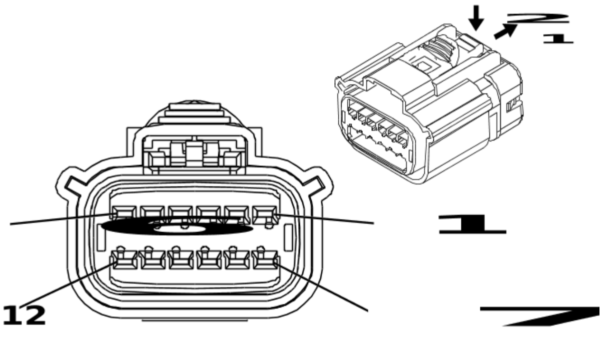
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY / BU	6358	I	—	Output Speed Signal	1	0.5	GY / BU	6358	II	—
2	0.5	YE / GN	4170	I	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	2	0.5	YE / GN	4170	II	—
3	0.5	YE / GN	4170	I	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	3	0.5	YE / GN	4170	II	—
4	0.5	YE / BU	4171	I	—	Transmission Input Shaft Speed Sensor Circuit 9V Reference	4	0.5	YE / BU	4171	II	—
5	0.5	GN / YE	6353	I	—	Input Speed Signal	5	0.5	GN / YE	6353	II	—
6	0.5	GN / VT	4510	I	—	Transmission Intermediate Speed Signal	6	0.5	GN / VT	4510	II	—

X182 Chassis Harness to Power Steering Jumper Harness



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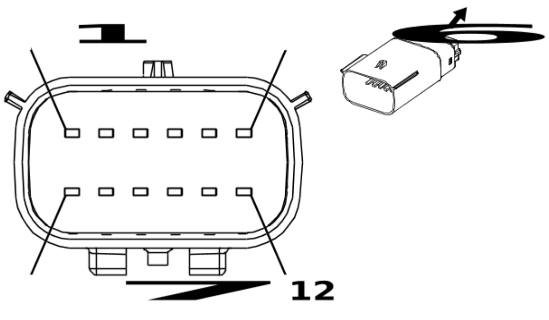


2687960

Connector Part Information

Harness Type: Chassis
OEM Connector: 15514623
Service Connector: 19355594
Description: 12 <p01>-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370817	J-35616-2A (GY)	J-38125-215A
II	Not required	J-35616-3 (GY)	No Tool Required

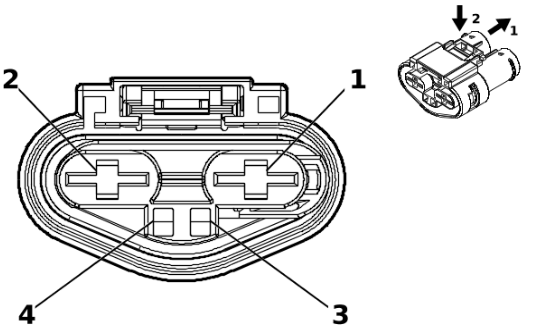
X182 Chassis Harness to Power Steering Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	2	0.5	BU	2500	II	—
3	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	3	0.5	WH	2501	II	—
4	0.5	BU / YE	6105	I	—	High Speed GMLAN Serial Data [+] 2	4	0.5	BU / YE	6105	II	—
5	0.5	WH	6106	I	—	High Speed GMLAN Serial Data [-] 2	5	0.5	WH	6106	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.5	WH / BU	5986	I	—	Serial Data Communication Enable	8	0.5	WH / BU	5986	II	—
9	0.5	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	9	0.5	BU	2500	II	—
10	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	10	0.5	WH	2501	II	—

X182 Chassis Harness to Power Steering Jumper Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	BU / YE	6105	I	—	High Speed GMLAN Serial Data [+] 2	11	0.5	BU / YE	6105	II	—
12	0.5	WH	6106	I	—	High Speed GMLAN Serial Data [-] 2	12	0.5	WH	6106	II	—

X183 Power Steering Harness to Power Steering Jumper Harness



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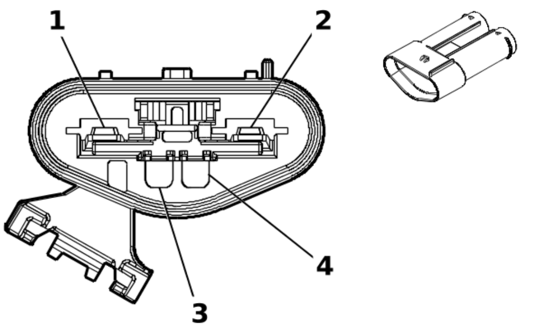


5330353

Connector Part Information

Harness Type: Power Steering

OEM Connector: 13508902

Service Connector: Service by Harness - See Part Catalog

Description: 4 <p01>-Way F 1.2, 2.8 MAK Series, Sealed(BK)

Connector Part Information

Harness Type: Power Steering Jumper

OEM Connector: 13582138

Service Connector: Service by Harness - See Part Catalog

Description: 4 <p01>-Way M 1.2, 2.8 MAK Series, Sealed(BK)

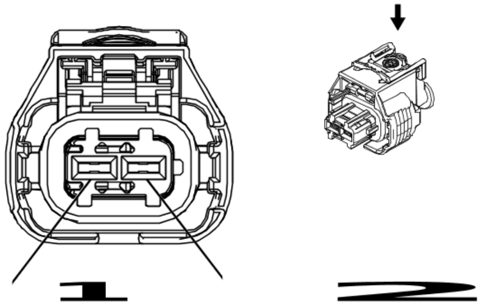
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	No Tool Required	No Tool Required

X183 Power Steering Harness to Power Steering Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	BK	350	I	—	Ground	1	—	BK	350	II	—
2	—	RD / VT	3542	I	—	Battery Positive Voltage	2	—	RD	3542	II	—
3 - 4	—	—	—	—	—	Not Occupied	3 - 4	—	—	—	—	—

X192 Engine Harness to Snow Plow Jumper Harness (VYU)



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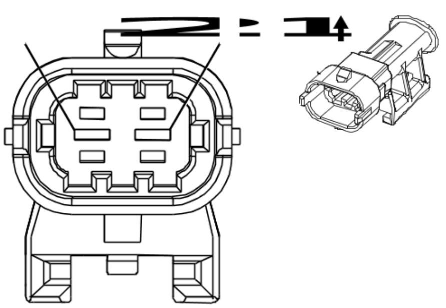


2667643

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2 <p01>-Way F 2.8 Series, Sealed(BK)

Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 10864494
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 2.8 Timer Series, Sealed(BK)

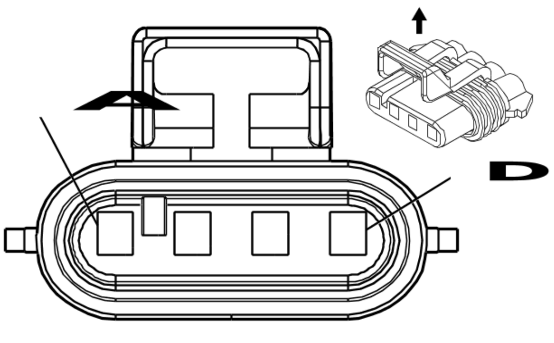
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X192 Engine Harness to Snow Plow Jumper Harness (VYU)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN	25	I	—	Charge Indicator Control	1	0.5	BN	25	II	—
2	0.5	GY	23	I	—	Generator Field Duty Cycle Signal	2	0.5	GY	23	II	—

X195 Body Harness to Upfitter Harness (6J3)



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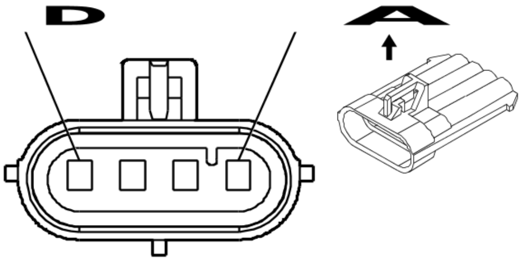


396241

Connector Part Information

Harness Type: Body

OEM Connector: 12162144

Service Connector: 19368708

Description: 4 <p01>-Way F 150 Metri-Pack Series, Sealed(BK)

Connector Part Information

Harness Type: Upfitter

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 4 <p01>-Way M (BK)

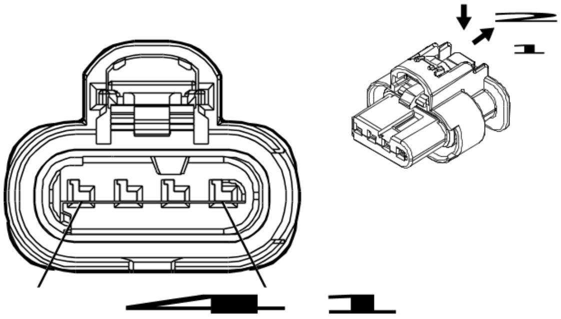
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X195 Body Harness to Upfitter Harness (6J3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1.0	BU / GN	6837	I	—	Security Siren 1 Control	A	1.0	BU	6837	II	—
B	1.0	GN / YE	6836	I	—	Security Siren 2 Control	B	1.0	GN / YE	6836	II	—
C	1.0	GY / VT	6838	I	—	Emergency Vehicle Front Flasher Control	C	1.0	GY / VT	6838	II	—
D	1.0	YE / GN	6835	I	—	Emergency Vehicle Front Lamp Control	D	1.0	YE	6835	II	—

X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness



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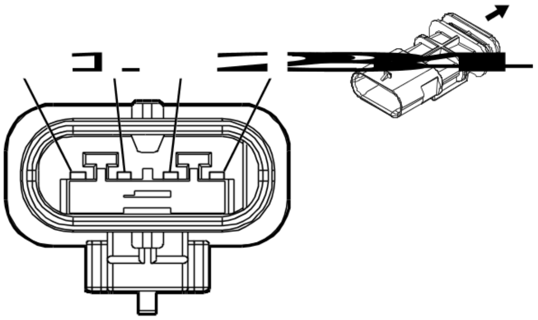


4567417

Connector Part Information

Harness Type: Instrument Panel

OEM Connector: 35053710

Service Connector: 19371193

Description: 4 <p01>-Way F 1.2 MCON-CB Series, Sealed(YE)

Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper

OEM Connector: 13583527

Service Connector: Service by Harness - See Part Catalog

Description: 4 <p01>-Way M (YE)

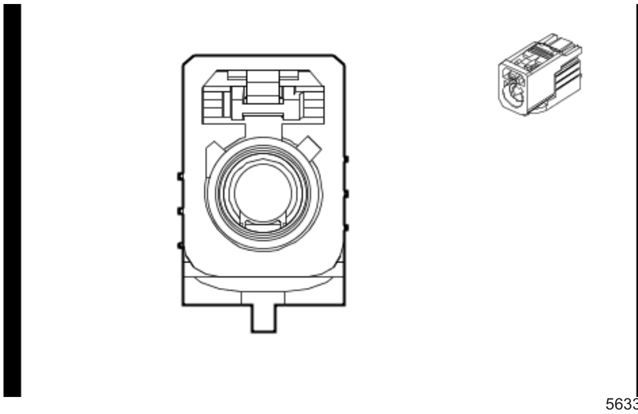
Terminal Part Information

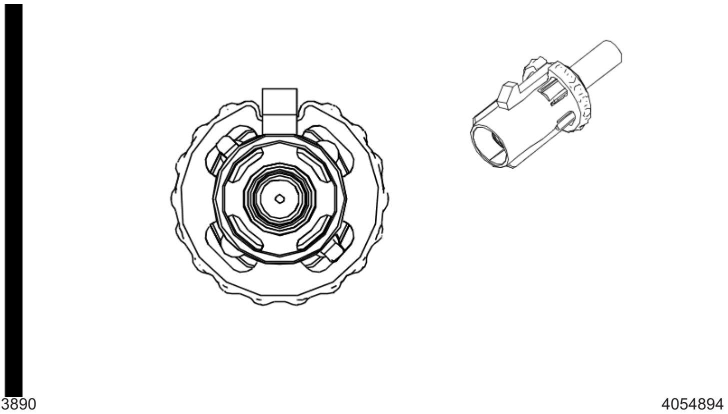
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required

X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	YE / OG	3025	I	—	Passenger Instrument Panel Air Bag Stage 1 High Control	1	0.35	YE / OG	3025	II	—
2	0.35	OG / WH	3024	I	—	Passenger Instrument Panel Air Bag Stage 1 Low Control	2	0.35	OG / WH	3024	II	—
3	0.35	GY / OG	3027	I	—	Passenger Instrument Panel Air Bag Stage 2 High Control	3	0.35	GY / OG	3027	II	—
4	0.35	OG / VT	3026	I	—	Passenger Instrument Panel Air Bag Stage 2 Low Control	4	0.35	OG / VT	3026	II	—

X209 Body Harness to Instrument Panel Harness (UVB/UVI/UVN/UVS)





Connector Part Information

Harness Type: Body COAX

OEM Connector: 13516410

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type(BU)

Connector Part Information

Harness Type: Instrument Panel COAX

OEM Connector: 13516061

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way M Coax Type(BU)

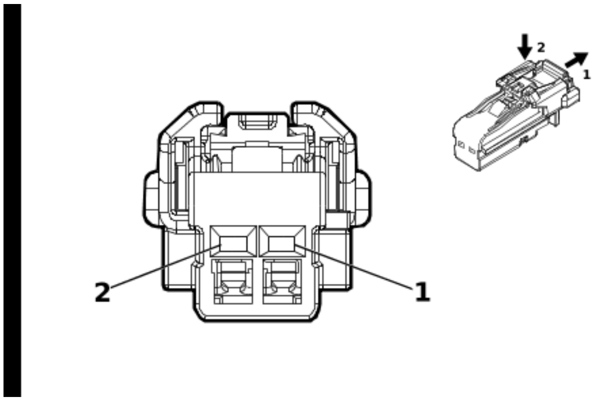
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X209 Body Harness to Instrument Panel Harness (UVB/UVI/UVN/UVS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X211 Instrument Panel Harness to Body Harness (UQA)



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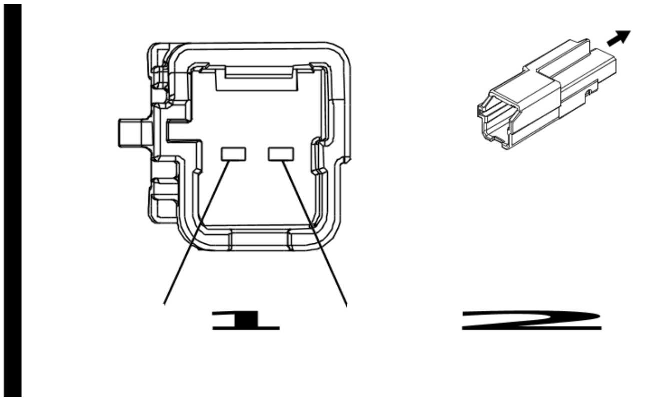


4116496

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8988
Service Connector: 19352066
Description: 2 <p01>-Way F 1.2 MCON Series(BK)

Connector Part Information

Harness Type: Body
OEM Connector: 33189233
Service Connector: 84815531
Description: 2 <p01>-Way M 1.2 Series(BK)

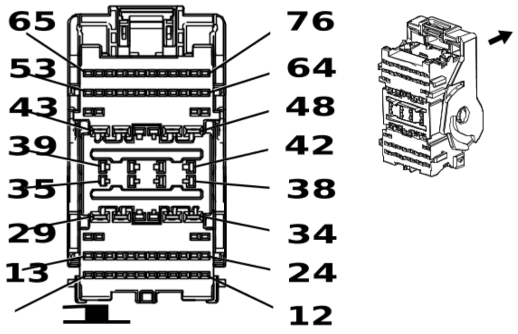
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

X211 Instrument Panel Harness to Body Harness (UQA)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN / BK	7214	I	—	Ethernet Bus 6 [-]	1	0.35	BN / BK	7214	II	—
2	0.35	GY / BK	7215	I	—	Ethernet Bus 6 [+]	2	0.35	GY / BK	7215	II	—

X225 Instrument Panel Harness to Body Harness



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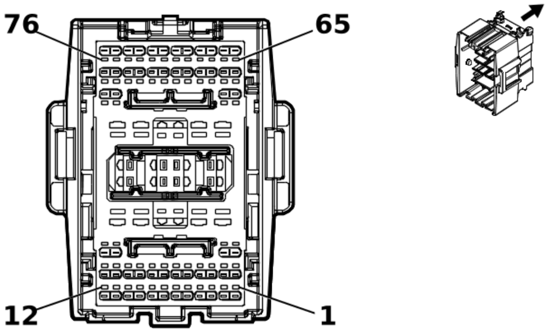


5277492

Connector Part Information

Harness Type: Instrument Panel

OEM Connector: 6098-8758

Service Connector: 84581287

Description: 76 <p01>-Way F 1.2, 1.5, 2.8 YESC Series(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35273135

Service Connector: 13526160

Description: 76 <p01>-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575708	J-35616-2A (GY)	J-38125-215A
II	13587516	J-35616-4A (PU)	J-38125-11A
III	84962854	J-35616-12 (BU)	J-38125-215A
IV	13587516	J-35616-4A (PU)	J-38125-11A
V	84616651	J-35616-13 (BU)	J-38125-215A
VI	85119177	J-35616-3 (GY)	J-38125-215A

X225 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.35	BU / YE	5361	III	—	Brake Apply Sensor Signal	3	0.35	BU / YE	5361	V	—
4	0.35	BK / BN	5360	III	—	Brake Apply Sensor Low Reference	4	0.35	BK / BN	5360	V	—
5	0.35	WH	5359	III	—	Brake Apply Sensor Control	5	0.35	WH	5359	V	—
6	0.35	BK / GY	2204	III	—	Enhanced Driver Mode 1 Switch Low Reference	6	0.35	BK / GY	2204	V	—
7	0.35	GY	4109	III	—	Driver Mode Switch 5V Reference	7	0.35	GY	4109	V	—
8	0.35	WH / BN	2203	III	—	Enhanced Driver Mode 2 Switch Signal	8	0.35	WH / BN	2203	V	—

X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.35	YE	6817	III	—	LED Backlight Dimming Control 1	9	0.35	YE	6817	V	—
10	0.35	GN	5060	III	—	Low Speed GMLAN Serial Data	10	0.35	GN	5060	V	—
11	0.35	VT / GY	1630	III	—	Steering Column Key Cylinder Lock Solenoid Actuator Control	11	0.35	VT / GY	1630	V	—
12	0.35	VT / BK	3	III	—	Run/Crank Ignition 1 Voltage	12	0.35	VT / BK	3	V	—
13	0.35	GN / BK	3558	III	—	Passive Start Switch Signal 2	13	0.35	GN / BK	3558	V	—
14	0.35	VT / YE	4	III	—	Accessory Ignition Voltage	14	0.35	VT / YE	4	V	—
15	0.35	OG / VT	3021	III	—	Steering Wheel Air Bag Stage 1 High Control	15	0.35	OG / VT	3021	V	—
16	0.35	BN / OG	3020	III	—	Steering Wheel Air Bag Stage 1 Low Control	16	0.35	BN / OG	3020	V	—
17	0.35	OG / GN	3023	III	—	Steering Wheel Air Bag Stage 2 High Control	17	0.35	OG / GN	3023	V	—
18	0.35	WH / OG	3022	III	—	Steering Wheel Air Bag Stage 2 Low Control	18	0.35	WH / OG	3022	V	—
19	0.35	GN / BU	2733	III	—	Electronic Brake Control Module LIN Bus 2	19	0.35	GN / BU	2733	V	—
20	0.35	YE / WH	1690	III	—	Mirror Dimming Signal	20	0.35	YE / WH	1690	V	—
21	0.35	BK / YE	1691	III	—	Automatic Day/Night Mirror Low Reference	21	0.35	BK / YE	1691	V	—
22	0.35	GN	4512	III	—	Wireless Charging System Charge Indicator Control	22	0.35	GN	4512	V	—
23	0.35	GN / WH	4115	III	—	Body Control Module LIN Bus 5	23	0.35	GN / WH	4115	V	—
24	0.35	BU / YE	6105	III	—	High Speed GMLAN Serial Data [+] 2	24	0.5	BU / YE	6105	V	—

X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.35	WH	6106	III	—	High Speed GMLAN Serial Data [-] 2	25	0.5	WH	6106	V	—
26	0.35	BN / WH	419	III	—	Check Engine Indicator Control	26	0.35	BN / WH	419	V	—
27	0.35	GN / GY	3277	III	—	Vehicle Anti-Theft System Immobilizer Low Reference	27	0.35	GN / GY	3277	V	—
28	0.35	WH / BU	5986	III	—	Serial Data Communication Enable	28	0.35	WH / BU	5986	V	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	0.35	YE / WH	816	II	—	Brake Transmission Shift Interlock Solenoid Actuator Control	30	0.35	YE / WH	816	IV	—
31	0.35	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	31	0.5	WH	2501	VI	—
32	0.35	BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	32	0.5	BU	2500	VI	—
33	0.75	BU / VT	1857	II	—	Left Front Midrange Speaker [+] Control	33	0.75	BU / VT	1857	IV	—
34	0.75	BU / BN	1957	II	—	Left Front Midrange Speaker [-] Control	34	0.75	BU / BN	1957	IV	—
35	0.5	WH / BN	6815	I	—	Inadvertent Load Control	35	0.5	WH / BN	6815	VI	—
36	0.35	GN / WH	1932	I	—	Shift Select Switch Park Signal	36	0.35	GN / WH	1932	VI	—
37 - 38	—	—	—	—	—	Not Occupied	37 - 38	—	—	—	—	—
39	0.35	BU / GY	553	I	—	Shift Select Switch Performance Signal	39	0.35	BU / GY	553	VI	—
40 - 41	—	—	—	—	—	Not Occupied	40 - 41	—	—	—	—	—

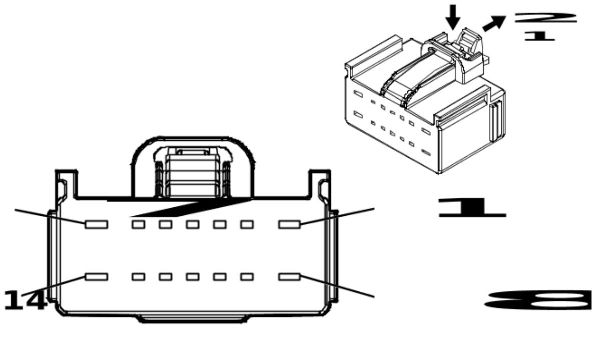
X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
42	0.35 0.35 0.35	BU / YE BU / YE BU / YE	6844 7176 7176	I	JHD WLD WLD	ABS/Traction Control Hill Descent Control Switch Signal All Windows Open Switch Signal All Windows Open Switch Signal	42	0.35 0.35	BU / YE BU / YE	6844 7176	VI VI	JHD WLD
43	—	—	—	—	—	Not Occupied	43	—	—	—	—	—
44	0.35	Bare	514	II	—	Low Reference	44	0.35	Bare	514	IV	—
45	0.75	BK	5683	I	—	120V AC Phase A	45	0.75	BK	5683	VI	—
46	0.75	RD	5684	I	—	120V AC Phase B	46	0.75	RD	5684	VI	—
47	0.75	BN / BU	118	II	—	Left Front Speaker [-] Control 1	47	0.75	BN / BU	118	IV	—
48	0.75	BU	201	II	—	Left Front Speaker 1 [+] Control	48	0.75	BU	201	IV	—
49	0.35	BU / BN	7573	III	—	A/C Compressor Solenoid Valve Control	49	0.35	BU / BN	7573	V	—
50	0.35	BU / YE	7574	III	—	A/C Compressor Solenoid Valve Control	50	0.35	BU / YE	7574	V	—
51	0.5	GN	199	III	—	Left Rear Speaker [+] Control	51	0.5	GN	199	V	—
52	0.5	GN / BK	116	III	—	Left Rear Speaker [-] Control	52	0.5	GN / BK	116	V	—
53	0.35	GN / BN	507	III	—	Wait To Start Indicator Control	53	0.35	GN / BN	507	V	—
54	0.35	WH / BN	7296	III	—	Right Minor Endgate Ajar Signal	54	0.35	WH / BN	7296	V	—
55	0.35	YE / BU	7295	III	—	Left Minor Endgate Ajar Signal	55	0.35	YE / BU	7295	V	—
56	0.35	GN / VT	7533	III	—	Immobilizer LIN Bus 1	56	0.35	GN / VT	7533	V	—
57	0.35	GN / YE	2731	III	—	Electronic Brake Control Module LIN Bus 1	57	0.35	GN / YE	2731	V	—
58	—	—	—	—	—	Not Occupied	58	—	—	—	—	—
59	0.35	BN	7754	III	—	AC Power Outlet Enable Signal	59	0.5	BN	7754	V	—

X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
60	0.35	GN / VT	1601	III	—	Steering Column Lock Signal	60	0.35	GN / VT	1601	V	—
61	0.35	BK / GY	3559	III	—	Passive Start Switch 2 Low Reference	61	0.35	BK / GY	3559	V	—
62	—	—	—	—	—	Not Occupied	62	—	—	—	—	—
63	0.35	BU / YE	6105	III	—	High Speed GMLAN Serial Data [+] 2	63	0.5	BU / YE	6105	V	—
64	0.35	WH	6106	III	—	High Speed GMLAN Serial Data [-] 2	64	0.5	WH	6106	V	—
65	—	—	—	—	—	Not Occupied	65	—	—	—	—	—
66	0.5	BN / BK	3552	III	—	Interior Passive Entry Antenna 1 High Signal	66	0.35	BN / BK	3552	V	—
67	0.5	WH	3553	III	—	Interior Passive Entry Antenna 1 Low Signal	67	0.35	WH	3553	V	—
68	0.35	YE / VT	6191	III	—	Power Rear Window Switch Open Signal	68	0.35	YE / VT	6191	V	—
69	0.35	WH	6192	III	—	Sliding Rear Window Switch Close Signal	69	0.35	WH	6192	V	—
70	0.35	GY / BK	3276	III	—	Immobilizer Control Module Control	70	0.35	GY / BK	3276	V	—
71	—	—	—	—	—	Not Occupied	71	—	—	—	—	—
72	0.35	BN	1560	III	—	Neutral Indicator Control	72	0.35	BN	1560	V	—
73	—	—	—	—	—	Not Occupied	73	—	—	—	—	—
74	0.35	BU / BN	6807	III	—	DC/AC Inverter Control	74	0.35	BU / BN	6807	V	—
75	0.35	VT	185	III	—	Low Washer Fluid Indicator Control	75	0.35	VT	185	V	—
76	0.5	BN / WH	7462	III	—	Running Board Steps Disable Signal	76	0.35	BN / WH	7462	V	—

X241 Body Harness to Inverter Module Jumper Harness (K14/K15)



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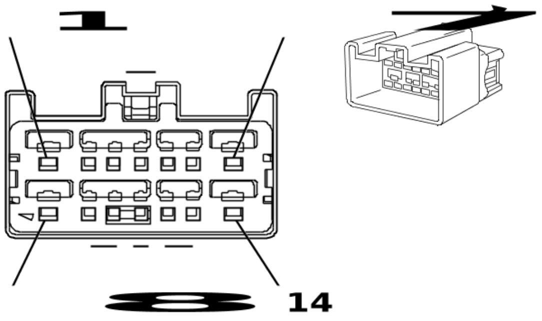

1283905

Connector Part Information

Harness Type: Body
OEM Connector: 33366376
Service Connector: 13513605
Description: 14 <p01>-Way F 1.5, 2.8 YESC Series(GY)

Connector Part Information

Harness Type: Inverter Module Jumper
OEM Connector: 10846900
Service Connector: Service by Harness - See Part Catalog
Description: 14 <p01>-Way M 1.5, 2.8 YESC Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575850	J-35616-2A (GY)	J-38125-11A
II	84962855	J-35616-4A (PU)	J-38125-11A
III	Not required	J-35616-3 (GY)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

X241 Body Harness to Inverter Module Jumper Harness (K14/K15)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	5683	II	—	120V AC Phase A	1	0.75	BK	5683	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	VT / YE	5985	I	—	Accessory Wake-Up Serial Data	3	0.35	VT / YE	5985	III	—
4	0.35	WH / GN	4628	I	—	DC/AC Inverter Relay Control	4	0.35	WH / GN	4628	III	—
5	0.35	BU / BN	6807	I	—	DC/AC Inverter Control	5	0.35	BU / BN	6807	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.75	BK / WH	2264	II	—	120V AC Phase A 2	7	0.75	BK / WH	2264	IV	—
8	0.75	RD	5684	II	—	120V AC Phase B	8	0.75	RD	5684	IV	—
9	0.35	Bare	514	I	—	Low Reference	9	0.35	Bare	514	III	—
10	0.35	GN	5060	I	—	Low Speed GMLAN Serial Data	10	0.35	GN	5060	III	—

X241 Body Harness to Inverter Module Jumper Harness (K14/K15) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.75	GN / BN	2266	I	—	DC/AC Inverter Control 2	12	0.75	GN / BN	2266	III	—
13	0.35	Bare	2257	I	—	Low Reference	13	0.35	Bare	2257	III	—
14	0.75	RD / WH	2265	II	—	120V AC Phase B 2	14	0.75	RD / WH	2265	IV	—

X250 Electrical Auxiliary Heater Jumper Harness to Body Harness (C32)

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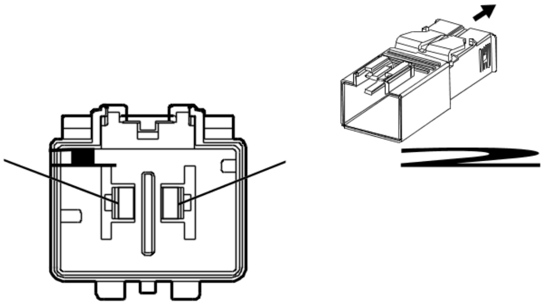


4891120

Connector Part Information

Harness Type: Electrical Auxiliary Heater Jumper Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 35134697
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 9.5 MCON-LL Series(BK)

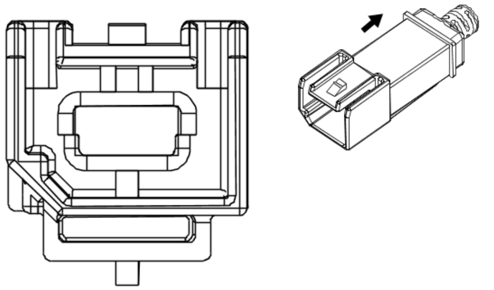
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-22 (RD)	No Tool Required
II	Not required	J-35616-21 (RD)	No Tool Required

X250 Electrical Auxiliary Heater Jumper Harness to Body Harness (C32)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
2	10	RD / GY	642	I	—	Battery Positive Voltage	2	10	RD / GY	642	II	—

X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)



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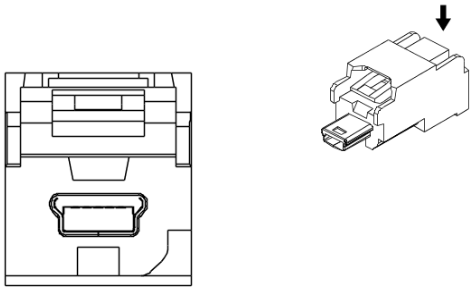


3028808

Connector Part Information

Harness Type: USB Receptacle Jumper USB
OEM Connector: 13584921
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type

Connector Part Information

Harness Type: Floor Console USB
OEM Connector: 13584764
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way M Coax Type

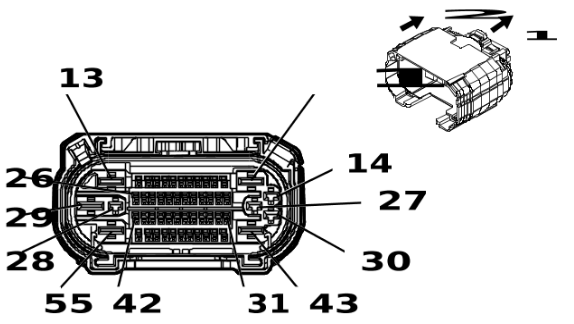
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	USB	—	I	—	USB Serial Data	—	—	USB	—	I	—

X256 Headliner Harness to Instrument Panel Harness



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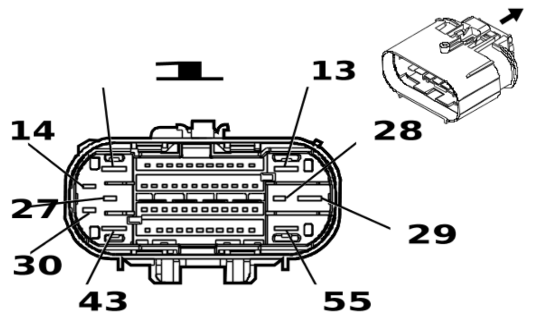


4993301

Connector Part Information

Harness Type: Headliner

OEM Connector: 35196713

Service Connector: 19371185

Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Instrument Panel

OEM Connector: 35205189

Service Connector: 84727364

Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332901	J-35616-35 (VT)	J-38125-212
II	19370818	J-35616-16 (LT GN)	J-38125-215A
III	84634921	J-35616-40 (BU)	J-38125-556
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A
VI	84992391	J-35616-5 (PU)	J-38125-36

X256 Headliner Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1050	III	—	Ground	1	2.5	BK	1050	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	BU / BK	7044	II	—	Microphone [-]	3	0.35	BU / BK	7044	V	—
4	0.35	VT / YE	7043	II	—	Microphone [+] Signal	4	0.35	VT / YE	7043	V	—
5	0.35	BU	655	II	—	Cellular Telephone Microphone Signal	5	0.35	BU	655	V	—
6	0.35	BK / BN	654	II	—	Cellular Telephone Microphone Low Reference	6	0.35	BK / BN	654	V	—
7	0.35	BK	1782	II	—	Low Reference	7	0.35	BK	1782	V	—
8	0.35	WH / GY	3936	II	—	High Speed GMLAN Serial Data [-] 8	8	0.35	WH / GY	3936	V	—

X256 Headliner Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.35	BU / GY	3935	II	—	High Speed GMLAN Serial Data [+] 8	9	0.35	BU / GY	3935	V	—
10	0.35	GY	157	II	—	Interior Lamp Control	10	0.35	GY	157	V	—
11	0.35	BK / WH	1851	II	—	Signal Ground	11	0.5	BK / WH	1851	V	—
12 - 13	—	—	—	—	—	Not Occupied	12 - 13	—	—	—	—	—
14	2.5	RD / GN	3140	I	—	Battery Positive Voltage	14	2.5	RD / GN	3140	VI	—
15	0.5	WH / VT	1430	II	—	Exterior Courtesy Lamp Control	15	0.5	WH / VT	1430	V	—
16	0.35	WH / BU	5986	II	—	Serial Data Communication Enable	16	0.35	WH / BU	5986	V	—
17	0.35	BK / YE	1691	II	—	Automatic Day/Night Mirror Low Reference	17	0.35	BK / YE	1691	V	—
18	0.35	GY / GN	7565	II	—	Windshield Temperature Sensor Signal	18	0.35	GY / GN	7565	V	—
19	0.5	WH / BN	6815	II	—	Inadvertent Load Control	19	0.5	WH / BN	6815	V	—
20	0.35	GN	2308	II	—	Passenger Air Bag Off Indicator Control	20	0.35	GN	2308	V	—
21	0.35	BU	2307	II	—	Passenger Air Bag On Indicator Control	21	0.35	BU	2307	V	—
22	0.35	YE / WH	1690	II	—	Mirror Dimming Signal	22	0.35	YE / WH	1690	V	—
23	0.35	WH	6192	II	—	Sliding Rear Window Switch Close Signal	23	0.35	WH	6192	V	—
24	0.35	GY	156	II	—	Courtesy Lamp Switch Signal	24	0.35	GY	156	V	—
25	0.35	GN	5060	II	—	Low Speed GMLAN Serial Data	25	0.35	GN	5060	V	—
26	0.35	YE / BU	3197	II	—	Intake Air Humidity and Temperature Sensor Signal	26	0.35	YE / BU	3197	V	—
27 - 29	—	—	—	—	—	Not Occupied	27 - 29	—	—	—	—	—
30	2.5	GN / BU	5989	I	—	Emergency Vehicle Lamp Relay Control	30	2.5	GN / BU	5989	VI	—

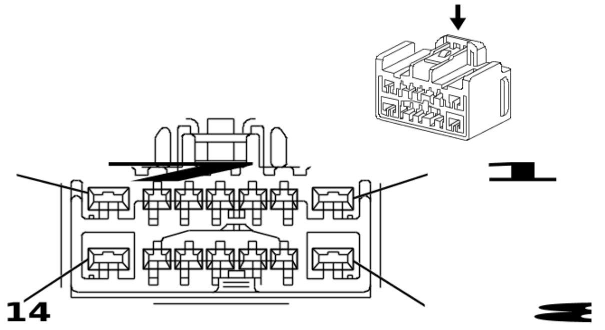
X256 Headliner Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
31	0.35	BN / WH	2517	II	—	Telematics Switch Red LED Indicator Control	31	0.35	BN / WH	2517	V	—
32	0.35	YE / VT	2516	II	—	Telematics Switch Green LED Indicator Control	32	0.35	YE / VT	2516	V	—
33	0.35	GN / WH	24	II	—	Backup Lamp Control	33	0.35	GN / WH	24	V	—
34	0.35	GY / GN	328	II	—	Interior Lamp Defeat Switch Signal	34	0.35	GY / GN	328	V	—
35	0.35	BU / GY	4672	II	—	Dome Lamp Off Indicator Control	35	0.35	BU / GY	4672	V	—
36	—	—	—	—	—	Not Occupied	36	—	—	—	—	—
37	0.35	GN / WH	2514	II	—	Telematics Switch Signal	37	0.35	GN / WH	2514	V	—
38	0.35	GN / BK	2515	II	—	Telematics Switch Supply Voltage	38	0.35	GN / BK	2515	V	—
39	0.5 0.5	VT / WH VT / GY	5065 1054	II II	EXTENDED CAB/ CREW CAB REGULAR CAB	Stop Lamp Control Stop Lamp Control	39	0.35	VT / GY	1054	V	—
40	0.35	WH	3152	II	—	Lane Departure Warning Indicator Control	40	0.35	WH	3152	V	—
41	0.35	GY / WH	3153	II	—	Lane Departure Warning Disable Switch Signal	41	0.35	GY / WH	3153	V	—
42	0.35	YE	6817	II	—	LED Backlight Dimming Control 1	42	0.35	YE	6817	V	—
43 - 44	—	—	—	—	—	Not Occupied	43 - 44	—	—	—	—	—
45	0.35	WH	6816	II	—	Indicator Dimming Control	45	0.35	WH	6816	V	—
46	0.35	YE / RD	597	II	—	5V Reference	46	0.35	YE / RD	597	V	—
47	0.35	VT / GN	7558	II	—	Front Footwell Accent Lighting Control	47	0.35	VT / GN	7558	V	—
48	0.35	VT / WH	5234	II	—	Passenger Seat Belt Indicator Control	48	0.35	VT / WH	5234	V	—

X256 Headliner Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
49	0.35	BK / BU	7566	II	—	Windshield Temperature and Inside Moisture Sensor Low Reference	49	0.35	BK / BU	7566	V	—
50	0.35	GN / BN	6132	II	—	Body Control Module LIN Bus 1	50	0.35	GN / BN	6132	V	—
51	0.35	GY / BU	7564	II	—	Humidity Sensor Signal 2	51	0.35	GY / BU	7564	V	—
52	0.35	YE / VT	6191	II	—	Power Rear Window Switch Open Signal	52	0.35	YE / VT	6191	V	—
53 - 55	—	—	—	—	—	Not Occupied	53 - 55	—	—	—	—	—

X260 Upfitter Harness to Instrument Panel Harness (9L7)



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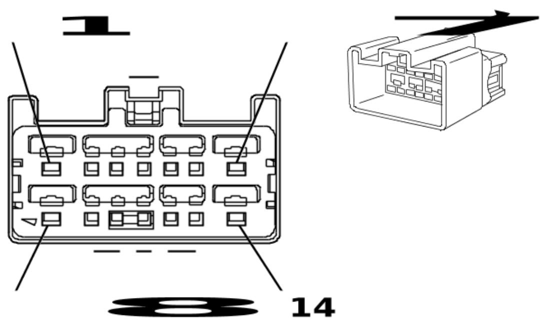


1283905

Connector Part Information

Harness Type: Upfitter
OEM Connector: 10847017
Service Connector: Service by Harness - See Part Catalog
Description: 14 <p01>-Way F 1.5, 2.8 YESC Series(L-GY)

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10846900
Service Connector: 88956523
Description: 14 <p01>-Way M 1.5, 2.8 Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	13578907	J-35616-3 (GY)	J-38125-553
IV	13578908	J-35616-5 (PU)	J-38125-11A

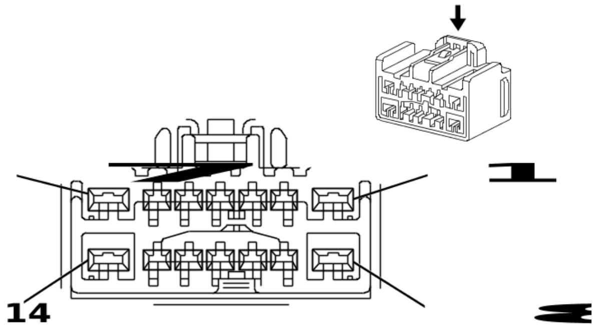
X260 Upfitter Harness to Instrument Panel Harness (9L7)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	1050	II	—	Ground	1	2	BK	1250	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	YE	6817	I	—	LED Backlight Dimming Control 1	3	0.5	YE	6817	III	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	WH / BU	3691	I	—	Trailer Brake Apply Signal	5	0.5	WH / BU	3691	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	2	RD / VT	1242	II	—	Battery Positive Voltage	7	2	RD / VT	1242	IV	—
8	2.5	GN / BU	5989	II	—	Emergency Vehicle Lamp Relay Control	8	2.5	GN / BU	5989	IV	—
9 - 10	—	—	—	—	—	Not Occupied	9 - 10	—	—	—	—	—
11	0.35	WH	6816	I	—	Indicator Dimming Control	11	0.35	WH	6816	III	—

X260 Upfitter Harness to Instrument Panel Harness (9L7) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	VT / GN	39	I	—	Run/Crank Ignition 1 Voltage	13	0.35	VT / WH	239	III	—
14	2	BU	47	II	—	Trailer Auxiliary Control	14	2	BU	47	IV	—

X260 Upfitter Harness to Instrument Panel Harness (Z82-JL1)



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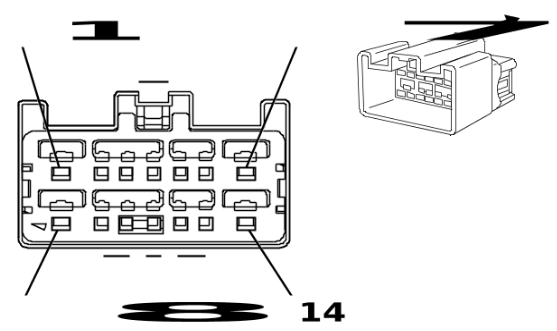


1283905

Connector Part Information

Harness Type: Upfitter
OEM Connector: 10847017
Service Connector: Service by Harness - See Part Catalog
Description: 14 <p01>-Way F 1.5, 2.8 YESC Series(L-GY)

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 7282-6447-40
Service Connector: 88956523
Description: 14 <p01>-Way M 1.5, 2.8 YESC Series(L-GY)

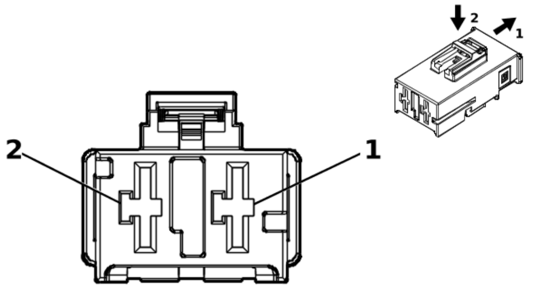
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	13578907	J-35616-3 (GY)	J-38125-553
IV	13578908	J-35616-5 (PU)	J-38125-11A

X260 Upfitter Harness to Instrument Panel Harness (Z82-JL1)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	BK	1250	II	—	Ground	1	2	BK	1250	IV	—
2 - 4	—	—	—	—	—	Not Occupied	2 - 4	—	—	—	—	—
5	0.5	WH / BU	3691	I	—	Trailer Brake Apply Signal	5	0.5	WH / BU	3691	III	—
6	—	—	—	—	—	Accessory Ignition Voltage	6	0.35	VT / YE	43	III	—
7	2	RD / VT	1242	II	—	Battery Positive Voltage	7	2	RD / VT	1242	IV	—
8	—	—	—	—	—	Emergency Vehicle Lamp Relay Control	8	2.5	GN / BU	5989	IV	—
9	—	—	—	—	—	Out of Park Signal	9	0.35	YE	6812	III	—
10	—	—	—	—	—	Vehicle Speed Signal	10	0.35	GN / GY	817	III	—
11 - 13	—	—	—	—	—	Not Occupied	11 - 13	—	—	—	—	—
14	2	BU	47	II	—	Trailer Auxiliary Control	14	2	BU	47	IV	—

X261 Upfitter Harness to Upfitter Harness (9L7)



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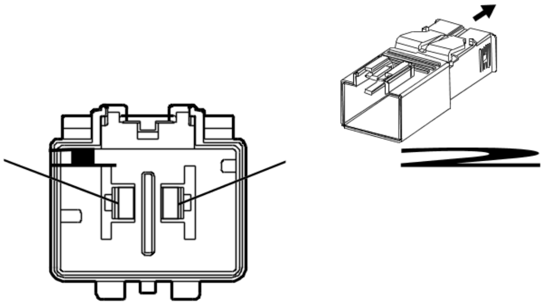


4891120

Connector Part Information

Harness Type: Upfitter
OEM Connector: 35134698
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way F 9.5 MCON-LL Series(BK)

Connector Part Information

Harness Type: Upfitter
OEM Connector: 35134697
Service Connector: Service by Harness - See Part Catalog
Description: 2 <p01>-Way M 9.5 MCON-LL Series(BK)

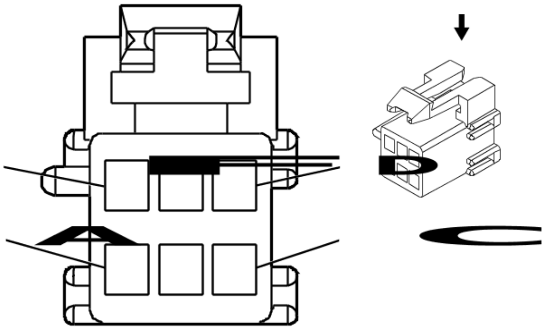
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-22 (RD)	No Tool Required
II	Not required	J-35616-21 (RD)	No Tool Required

X261 Upfitter Harness to Upfitter Harness (9L7)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	10	RD / BU	42	I	—	Battery Positive Voltage	1	10	RD / BU	42	II	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—

X272 Instrument Panel Harness to Upfitter Harness (6J3)



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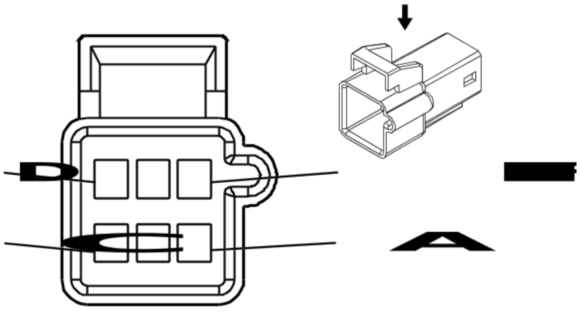


40425

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12064762
Service Connector: 13583923
Description: 6 <p01>-Way F 150 Metri-Pack Series(GY)

Connector Part Information

Harness Type: Upfitter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way M (GY)

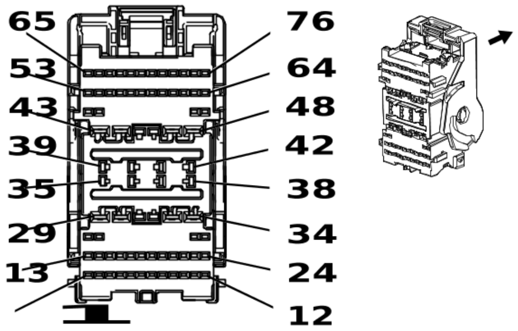
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X272 Instrument Panel Harness to Upfitter Harness (6J3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	—	—	—	—	—	Not Occupied	A	—	—	—	—	—
B	1.0	BU / GN	6837	I	—	Security Siren 1 Control	B	1.0	BU / GN	6837	II	—
C	1.0	GN / YE	6836	I	—	Security Siren 2 Control	C	1.0	GN / YE	6836	II	—
D	1.0	GY / VT	6838	I	—	Emergency Vehicle Front Flasher Control	D	1.0	GY / VT	6838	II	—
E	1.0	YE / GN	6835	I	—	Emergency Vehicle Front Lamp Control	E	1.0	YE / GN	6835	II	—
F	—	—	—	—	—	Not Occupied	F	—	—	—	—	—

X275 Instrument Panel Harness to Body Harness



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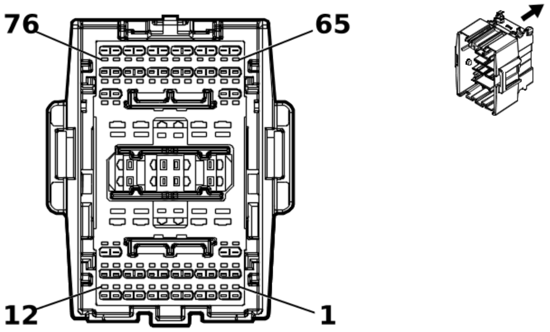


5277492

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 6098-8758
Service Connector: 84581287
Description: 76 <p01>-Way F 1.2, 1.5, 2.8 YESC Series(BK)

Connector Part Information

Harness Type: Body
OEM Connector: 35273135
Service Connector: 13526160
Description: 76 <p01>-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575708	J-35616-2A (GY)	J-38125-11A
II	13587516	J-35616-4A (PU)	J-38125-11A
III	84962854	J-35616-16 (LT GN)	J-38125-215A
IV	84616651	J-35616-17 (LT GN)	J-38125-215A
V	84888592	J-35616-5 (PU)	J-38125-215A
VI	85119177	J-35616-3 (GY)	J-38125-215A

X275 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	RD / WH	3440	III	—	Battery Positive Voltage	2	0.5	RD / WH	3440	IV	—
3	0.5	BN / WH	3895	III	—	Roof Rail Air Bag Disable Switch Low Reference	3	0.5	BN / WH	3895	IV	—
4	0.5	BU / WH	3119	III	—	Roof Rail Air Bag Disable Switch Signal	4	0.5	BU / WH	3119	IV	—
5	0.35	GY / GN	2555	III	—	Rear Parking Assist Disable Signal	5	0.35	GY / GN	2555	IV	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	VT / WH	5234	III	—	Passenger Seat Belt Indicator Control	7	0.35	VT / WH	5234	IV	—

X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.35	BU	2307	III	—	Passenger Air Bag On Indicator Control	8	0.35	BU	2307	IV	—
9	0.35	BU / GY	4672	III	—	Dome Lamp Off Indicator Control	9	0.35	BU / GY	4672	IV	—
10	0.35	GY	156	III	—	Courtesy Lamp Switch Signal	10	0.35	GY	156	IV	—
11	0.35	GN / BU	761	III	—	Blower Speed Feedback Signal	11	0.35	GN / BU	761	IV	—
12	0.35	GN / GY	817	III	—	Vehicle Speed Signal	12	0.35	GN / GY	817	IV	—
13	0.35	GN	2308	III	—	Passenger Air Bag Off Indicator Control	13	0.35	GN	2308	IV	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.35	YE / OG	3025	III	—	Passenger Instrument Panel Air Bag Stage 1 High Control	15	0.35	YE / OG	3025	IV	—
16	0.35	OG / WH	3024	III	—	Passenger Instrument Panel Air Bag Stage 1 Low Control	16	0.35	OG / WH	3024	IV	—
17	0.35	GY / OG	3027	III	—	Passenger Instrument Panel Air Bag Stage 2 High Control	17	0.35	GY / OG	3027	IV	—
18	0.35	OG / VT	3026	III	—	Passenger Instrument Panel Air Bag Stage 2 Low Control	18	0.35	OG / VT	3026	IV	—
19	0.35	GN / BN	6132	III	—	Body Control Module LIN Bus 1	19	0.5	GN / BN	6132	IV	—
20	0.35	GY / GN	1102	III	—	Low Speed GMLAN Serial Data 2	20	0.35	GY / GN	1102	IV	—
21	0.35	YE	6817	III	—	LED Backlight Dimming Control 1	21	0.35	YE	6817	IV	—
22	0.5	GN / GY	6135	III	—	Body Control Module LIN Bus 4	22	0.35	GN / GY	6135	IV	—
23 - 26	—	—	—	—	—	Not Occupied	23 - 26	—	—	—	—	—
27	0.35	YE	7755	III	—	AC Power Outlet Status Indicator Control	27	0.35	YE	7755	IV	—

X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
28	0.35	VT / WH	239	III	—	Run/Crank Ignition 1 Voltage	28	0.35	VT / WH	239	IV	—
29	2	BK	1250	II	—	Ground	29	2	BK	1250	V	—
30	0.5	RD / GN	5140	II	—	Battery Positive Voltage	30	0.5	RD / GN	5140	V	—
31	0.5	BK / WH	2751	I	—	Signal Ground	31	0.75	BK / WH	2751	VI	—
32	—	—	—	—	—	Surveillance Switch Signal	32	0.35	WH / VT	6821	VI	—
33	0.75	WH / YE	1853	II	—	Right Front Midrange Speaker [+] Control	33	0.75	WH / YE	1853	V	—
34	0.75	BN / BK	1953	II	—	Right Front Midrange Speaker [-] Control	34	0.75	BN / BK	1953	V	—
35	0.35	GY	1198	I	—	Endgate Release Switch Analog Signal Interior	35	0.35	GY	1198	VI	—
36	0.5	WH / BU	3691	I	—	Trailer Brake Apply Signal	36	0.5	WH / BU	3691	VI	—
37	0.35	RD / WH	1340	I	—	Battery Positive Voltage	37	0.35	RD / WH	1340	VI	—
38 - 39	—	—	—	—	—	Not Occupied	38 - 39	—	—	—	—	—
40	0.35	GN / WH	24	I	—	Backup Lamp Control	40	0.35	GN / WH	24	VI	—
41	0.5	WH / VT	1430	I	—	Exterior Courtesy Lamp Control	41	1	WH / VT	1430	VI	—
42	—	—	—	—	—	Not Occupied	42	—	—	—	—	—
43	2	BU	47	II	—	Trailer Auxiliary Control	43	2	BU	47	V	—
44	2	RD / VT	1242	II	—	Battery Positive Voltage	44	2	RD / VT	1242	V	—
45	0.75	BK / WH	2751	I	—	Signal Ground	45	0.75	BK / WH	2751	VI	—
46	0.35	VT / BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	46	0.35	VT / BU	6091	VI	—
47	0.75	YE / BK	117	II	—	Right Front Speaker [-] Control 1	47	0.75	YE / BK	117	V	—
48	0.75	YE	200	II	—	Right Front Speaker 1 [+] Control	48	0.75	YE	200	V	—
49 - 50	—	—	—	—	—	Not Occupied	49 - 50	—	—	—	—	—

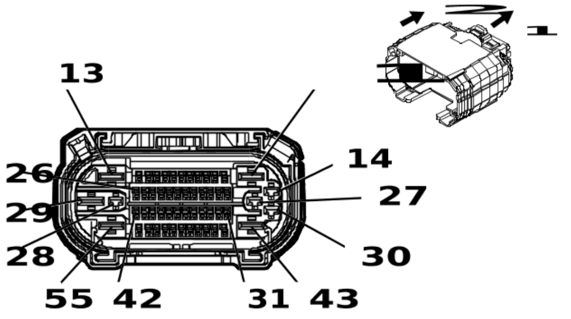
X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
51	0.5	WH	46	III	—	Right Rear Speaker [+] Control	51	0.5	WH	46	IV	—
52	0.5	BU / BK	115	III	—	Right Rear Speaker [-] Control	52	0.5	BU / BK	115	IV	—
53	—	—	—	—	—	Not Occupied	53	—	—	—	—	—
54	0.35	GY / WH	3272	III	—	Remote Control Door Lock Receiver Control	54	0.35	GY / WH	3272	IV	—
55	0.35	BU / WH	3275	III	—	Remote Control Door Lock Receiver Receive Signal	55	0.35	BU / WH	3275	IV	—
56	0.35	YE / GN	3274	III	—	Remote Control Door Lock Receiver Transmit Signal	56	0.35	YE / GN	3274	IV	—
57	0.35	GY	3273	III	—	Remote Control Door Lock Receiver Low Reference	57	0.35	GY	3273	IV	—
58	0.5	BN / VT	193	III	—	Rear Defogger Relay Control	58	0.5	BN / VT	193	IV	—
59	0.35	YE	6812	III	—	Out of Park Signal	59	0.35	YE	6812	IV	—
60 - 62	—	—	—	—	—	Not Occupied	60 - 62	—	—	—	—	—
63	0.35	WH / GN	1305	III	—	High Speed GMLAN Serial Data [-] 9	63	0.5	WH / GN	1305	IV	—
64	0.35	BU / GN	1304	III	—	High Speed GMLAN Serial Data [+] 9	64	0.5	BU / GN	1304	IV	—
65	—	—	—	—	—	Not Occupied	65	—	—	—	—	—
66	0.35	Bare	6974	III	—	Rearview Camera Low Reference	66	0.35	Bare	6974	IV	—
67	0.35	GY / YE	6972	III	—	Rearview Camera Signal [+]	67	0.35	GY / YE	6972	IV	—
68	0.35	WH / BU	6973	III	—	Rearview Camera Signal [-]	68	0.35	WH / BU	6973	IV	—
69	0.35	GN / BN	5852	III	—	Rear Parking Assist Disable LED Signal	69	0.35	GN / BN	5852	IV	—
70	0.35	VT / YE	43	III	—	Accessory Ignition Voltage	70	0.35	VT / YE	43	IV	—

X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
71 - 72	—	—	—	—	—	Not Occupied	71 - 72	—	—	—	—	—
73	0.35	VT / GY	1054	III	—	Stop Lamp Control	73	0.35 0.35	VT / GY VT / WH	1054 5065	IV IV	REGULAR CAB EXTENDED CAB/ CREW CAB
74	0.35	BN	7291	III	—	Major Endgate Release Switch Signal Interior	74	0.35	BN	7291	IV	—
75 - 76	—	—	—	—	—	Not Occupied	75 - 76	—	—	—	—	—

X310 Driver Seat Harness to Body Harness



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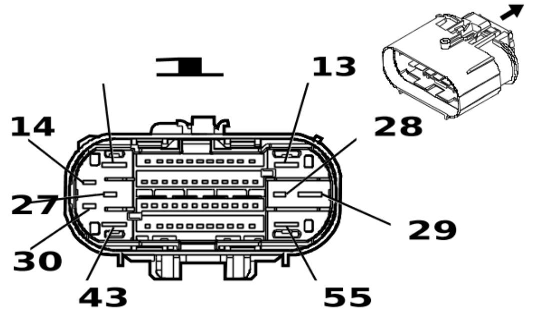


4993301

Connector Part Information

Harness Type: Driver Seat

OEM Connector: 35016652

Service Connector: Service by Harness - See Part Catalog

Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35205186

Service Connector: 84727364

Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	J-35616-43 (RD)	No Tool Required
IV	84847992	J-35616-32 (OR)	J-38125-36
V	84867140	J-35616-17 (LT GN)	J-38125-215A

X310 Driver Seat Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1150	II	—	Ground	1	2.5	BK	1150	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.5	GN / WH	7530	I	—	Driver Seat Memory Control Module LIN Bus 1	3	0.35	GN / WH	7530	V	—
4	0.5	RD / BN	1140	I	—	Battery Positive Voltage	4	0.35	RD / BN	1140	V	—
5	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	5	0.35	GN	5060	V	—
6	0.5	BU / GN	614	I	—	Seat Memory Switch Set Signal	6	0.35	BU / GN	614	V	—
7	0.5	BK / BU	5978	I	—	Memory Switch Low Reference	7	0.35	BK / BU	5978	V	—
8	0.5	WH	615	I	—	Seat Memory Switch Signal 1	8	0.35	WH	615	V	—

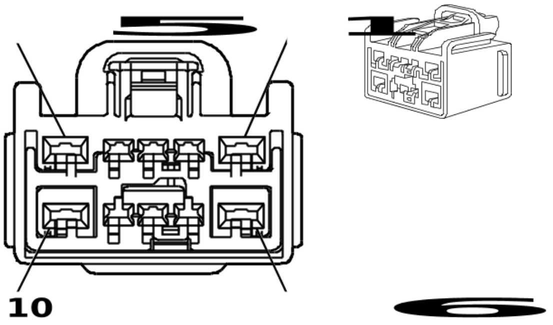
X310 Driver Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	BK / YE	2080	I	—	Driver Heated Seat Thermistor Low Reference	10	0.35	BK / YE	2080	V	—
11	0.5	YE / GY	2079	I	—	Driver Seat Heating Temperature Sensor Signal	11	0.35	YE / GY	2079	V	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	2.5	RD / YE	5040	II	—	Battery Positive Voltage	13	2.5	RD / YE	5040	IV	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.75	BN / VT	2077	I	—	Driver Seat Heating Element Control	15	0.75	BN / VT	2077	V	—
16	0.75	BN / BK	2078	I	—	Driver Seat Heating Element Low Reference	16	0.75	BN / BK	2078	V	—
17	0.5	BK / VT	2426	I	—	Driver Heated Back Thermistor Low Reference	17	0.35	BK / VT	2426	V	—
18	0.5	BU	2425	I	—	Driver Seat Back Heating Temperature Sensor Signal	18	0.35	BU	2425	V	—
19	0.75	BN	2432	I	—	Driver Seat Back Heating Element Control	19	0.75	BN	2432	V	—
20	0.5	GN / VT	5906	I	—	Driver Seat Blower Motor Control 1	20	0.35	GN / VT	5906	V	—
21	0.75	VT / WH	4939	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT / WH	4939	V	—
22 - 28	—	—	—	—	—	Not Occupied	22 - 28	—	—	—	—	—
29	0.75	RD / YE	8840	III	—	Battery Positive Voltage	29	0.75	RD / YE	8840	IV	—
30 - 31	—	—	—	—	—	Not Occupied	30 - 31	—	—	—	—	—
32	0.35	OG / BN	238	I	—	Driver Seat Belt Switch Signal	32	0.35	OG / BN	238	V	—
33	0.5	BK / OG	1363	I	—	Driver Seat Belt Switch Low Reference	33	0.35	BK / OG	1363	V	—

X310 Driver Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	OG / BU	3068	I	—	Driver Seat Side Air Bag High Control	35	0.5	OG / BU	3068	V	—
36	0.5	GN / OG	3069	I	—	Driver Seat Side Air Bag Low Control	36	0.5	GN / OG	3069	V	—
37 - 55	—	—	—	—	—	Not Occupied	37 - 55	—	—	—	—	—

X318 Sunroof Motor Harness to Headliner Harness (CF5)



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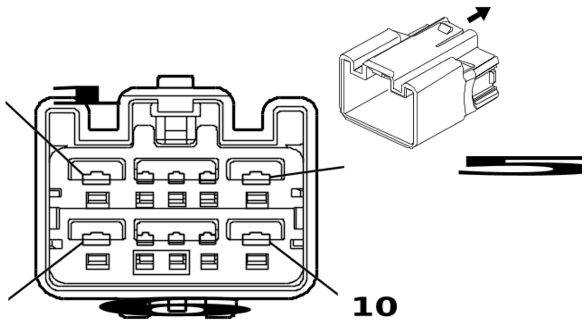


1851890

Connector Part Information

Harness Type: Sunroof Motor
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10 <p01>-Way F

Connector Part Information

Harness Type: Headliner
OEM Connector: 13506926
Service Connector: 89047070
Description: 10 <p01>-Way M YESC Kaizen Series(L-GY)

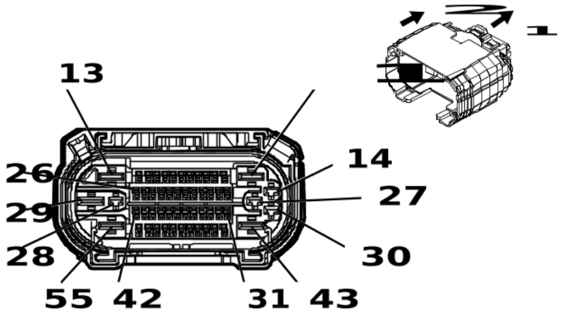
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	13578907	J-35616-3 (GY)	J-38125-553
III	13578908	J-35616-5 (PU)	J-38125-11A

X318 Sunroof Motor Harness to Headliner Harness (CF5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.35	BK / GY	128	I	—	Sunroof Switch Low Reference	3	0.35	BK / GY	128	II	—
4	0.35	GN / BN	6132	I	—	Body Control Module LIN Bus 1	4	0.35	GN / BN	6132	II	—
5	2.5	BK	1050	I	—	Ground	5	2.5	BK	1050	III	—
6	2.5	RD / GN	3140	I	—	Battery Positive Voltage	6	2.5	RD / GN	3140	III	—
7	0.35	BU / VT	5027	I	—	Sunroof Switch Serial Data 1 Signal	7	0.35	BU / VT	5027	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.35	WH / GN	3031	I	—	Sunroof Vent Switch Signal	9	0.35	WH / GN	3031	II	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—

X320 Passenger Seat Harness to Body Harness



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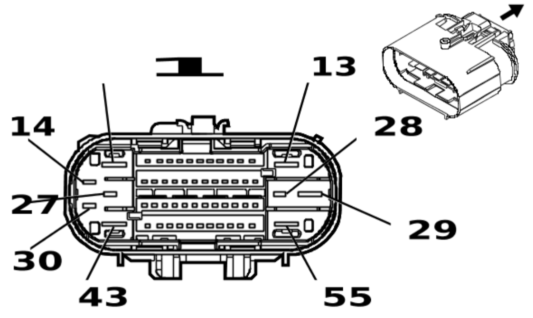


4993301

Connector Part Information

Harness Type: Passenger Seat

OEM Connector: 35253720

Service Connector: Service by Harness - See Part Catalog

Description: 55 <p01>-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35205187

Service Connector: 84727364

Description: 55 <p01>-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-42 (RD)	No Tool Required
IV	Not required	J-35616-43 (RD)	No Tool Required
V	84847992	J-35616-32 (OR)	J-38125-36
VI	84867140	J-35616-17 (LT GN)	J-38125-215A
VII	84992391	J-35616-5 (PU)	J-38125-215A

X320 Passenger Seat Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Ground	1	2.5	BK	1250	V	—
2 - 8	—	—	—	—	—	Not Occupied	2 - 8	—	—	—	—	—
9	0.5	GN / BU	6133	I	—	Body Control Module LIN Bus 2	9	0.35	GN / BU	6133	VI	—
10	0.5	BK / YE	2080	I	—	Driver Heated Seat Thermistor Low Reference	10	0.35	BK / YE	2080	VI	—
11	0.5	YE / GY	2079	I	—	Driver Seat Heating Temperature Sensor Signal	11	0.35	YE / GY	2079	VI	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	—	—	—	—	—	Battery Positive Voltage	13	2.5	RD / BN	1440	V	—

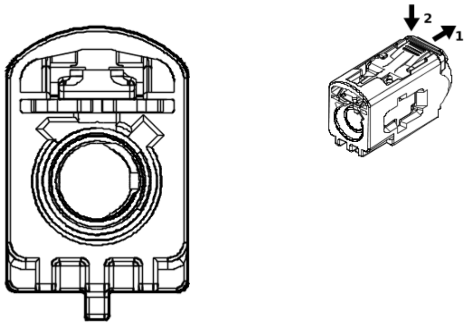
X320 Passenger Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
14	—	—	—	—	—	Battery Positive Voltage	14	0.5	RD	6140	VII	—
15	0.75	BN / VT	2077	I	—	Driver Seat Heating Element Control	15	0.75	BN / VT	2077	VI	—
16	0.75	BN / BK	2078	I	—	Driver Seat Heating Element Low Reference	16	0.75	BN / BK	2078	VI	—
17	0.5	BK / VT	2426	I	—	Driver Heated Back Thermistor Low Reference	17	0.35	BK / VT	2426	VI	—
18	0.5	BU	2425	I	—	Driver Seat Back Heating Temperature Sensor Signal	18	0.35	BU	2425	VI	—
19	0.75	BN	2432	I	—	Driver Seat Back Heating Element Control	19	0.75	BN	2432	VI	—
20	0.35	GN / VT	5906	I	—	Driver Seat Blower Motor Control 1	20	0.35	GN / VT	5906	VI	—
21	0.75	VT / WH	4939	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT / WH	4939	VI	—
22	0.5	RD / GN	4440	I	—	Battery Positive Voltage	22	0.5	RD / GN	4440	VI	—
23	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	23	0.35	GN	5060	VI	—
24	0.5	GY / OG	3946	I	—	Passenger Automatic Locking Retractor Switch Low Reference	24	0.5	GY / OG	3946	VI	—
25	0.5	OG / BN	3947	I	—	Passenger Automatic Locking Retractor Switch Signal	25	0.5	OG / BN	3947	VI	—
26	0.5	BK / WH	2551	I	—	Signal Ground	26	0.5	BK / WH	2551	VI	—
27	0.75	RD / GN	5140	II	—	Battery Positive Voltage	27	0.5	RD / GN	5140	VII	—
28	—	—	—	—	—	Not Occupied	28	—	—	—	—	—
29	0.75	RD / YE	8840	IV	—	Battery Positive Voltage	29	0.75	RD / YE	8840	V	—
30 - 31	—	—	—	—	—	Not Occupied	30 - 31	—	—	—	—	—

X320 Passenger Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
32	0.35	OG / VT	1362	I	—	Passenger Seat Belt Switch Signal	32	0.35	OG / VT	1362	VI	—
33	0.5	BK / OG	1361	I	—	Passenger Seat Belt Switch Low Reference	33	0.35	BK / OG	1361	VI	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	OG / GY	3066	I	—	Passenger Seat Side Air Bag High Control	35	0.35	OG / GY	3066	VI	—
36	0.5 0.5	BN / OG BU / OG	3067 3067	I I	A7E A7K	Passenger Seat Side Air Bag Low Control Passenger Seat Side Air Bag Low Control	36	0.35	BN / OG	3067	VI	—
37 - 55	—	—	—	—	—	Not Occupied	37 - 55	—	—	—	—	—

X330 Body Harness to Center High Mounted Stop Lamp Harness (UVN)



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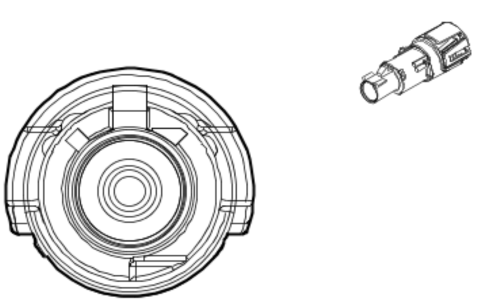


5518522

Connector Part Information

Harness Type: Body COAX

OEM Connector: 35227987

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type

Connector Part Information

Harness Type: Center High Mounted Stop Lamp COAX

OEM Connector: 33355538

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way M Coax Type(BK)

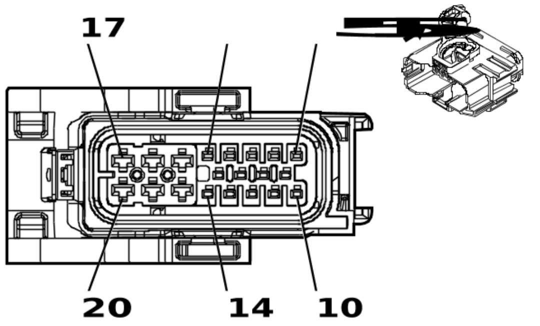
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X330 Body Harness to Center High Mounted Stop Lamp Harness (UVN)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Cargo Bed Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X348 Body Harness to Floor Console Harness (-AZ3)



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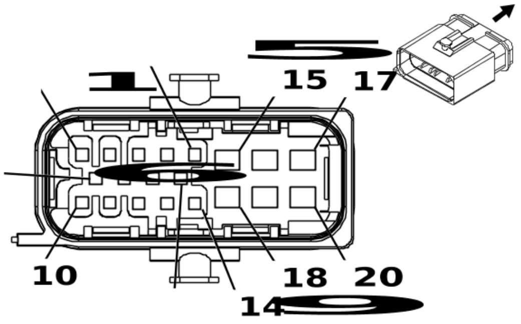


3825586

Connector Part Information

Harness Type: Body

OEM Connector: 13974124

Service Connector: 19371189

Description: 20 <p01>-Way F 1.2, 2.8 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Floor Console

OEM Connector: 13942796

Service Connector: Service by Harness - See Part Catalog

Description: 20 <p01>-Way M 1.2, 2.8 Multiple Contact Point Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580023	J-35616-35 (VT)	J-38125-215A
II	13580023	J-35616-35 (VT)	J-38125-557
III	19119772	J-35616-35 (VT)	J-38125-557
IV	84729890	J-35616-16 (LT GN)	J-38125-215A
V	Not required	J-35616-17 (LT GN)	No Tool Required
VI	Not required	J-35616-5 (PU)	No Tool Required

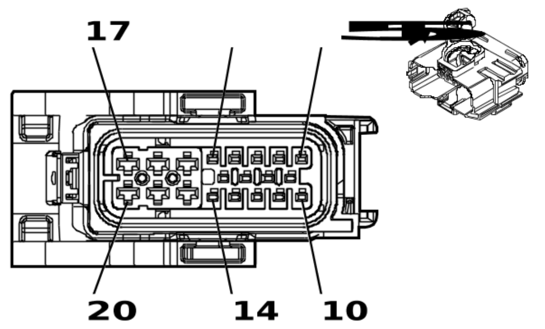
X348 Body Harness to Floor Console Harness (-AZ3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.35	YE	6817	IV	—	LED Backlight Dimming Control 1	2	0.5	YE	6817	VI	—
3	0.35	GN / VT	7533	IV	—	Immobilizer LIN Bus 1	3	0.35	GN / VT	7533	VI	—
4	0.35	GN / GY	3277	IV	—	Vehicle Anti-Theft System Immobilizer Low Reference	4	0.5	GN / GY	3277	VI	—
5	0.35	GY / BK	3276	IV	—	Immobilizer Control Module Control	5	0.5	GY / BK	3276	VI	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.35	GN / WH	4115	IV	—	Body Control Module LIN Bus 5	8	0.35	GN / WH	4115	V	—

X348 Body Harness to Floor Console Harness (-AZ3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.35	VT / YE	143	IV	—	Accessory Ignition Voltage	9	0.5	VT / YE	143	V	—
10	0.5	BK / WH	2751	IV	—	Signal Ground	10	0.5	BK / WH	2751	VI	—
11	0.35	VT	4601	IV	—	Retained Accessory Power Control	11	0.5	VT	4601	V	—
12	0.35	GN	4512	IV	—	Wireless Charging System Charge Indicator Control	12	0.35	GN	4512	V	—
13	0.35	GY / BK	3555	IV	—	Interior Passive Entry Antenna 2 Low Signal	13	0.5	GY / BK	3555	V	—
14	0.35	BU	3554	IV	—	Interior Passive Entry Antenna 2 High Signal	14	0.5	BU	3554	V	—
15	1.5	RD / WH	1040	II	—	Battery Positive Voltage	15	1.5	RD / WH	1040	VI	—
16	0.5	WH / BN	6815	III	—	Inadvertent Load Control	16	0.5	WH / BN	6815	VI	—
17	1	BK	1250	I	—	Ground	17	—	—	—	—	—
18	—	—	—	—	—	Not Occupied	18	—	—	—	—	—
19	0.35	BN	4511	IV	—	Wireless Charging System Fault Indicator Control Wireless Charging System Fault Indicator Control	19	0.5	BN	4511	VI	—
20	2	BK	1250	II	—	Ground	20	2	BK	1250	VI	—

X348 Body Harness to Front Center Seat Harness (AZ3)



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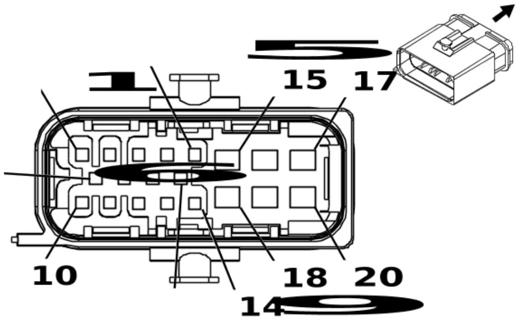


3825586

Connector Part Information

Harness Type: Body
OEM Connector: 13974124
Service Connector: 19371189
Description: 20 <p01>-Way F 1.2, 2.8 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Front Center Seat
OEM Connector: 13942796
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way M 1.2, 2.8 Multiple Contact Point Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580023	J-35616-35 (VT)	J-38125-215A
II	13580023	J-35616-35 (VT)	J-38125-557
III	84729890	J-35616-16 (LT GN)	J-38125-215A
IV	Not required	J-35616-17 (LT GN)	No Tool Required
V	Not required	J-35616-5 (PU)	No Tool Required

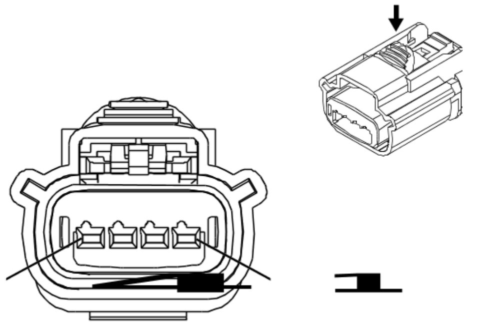
X348 Body Harness to Front Center Seat Harness (AZ3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.35	YE	6817	III	—	LED Backlight Dimming Control 1	2	—	—	—	—	—
3	0.35	GN / VT	7533	III	—	Immobilizer LIN Bus 1	3	0.35	GN / VT	7533	IV	—
4	0.35	GN / GY	3277	III	—	Vehicle Anti-Theft System Immobilizer Low Reference	4	0.35	GN / GY	3277	IV	—
5	0.35	GY / BK	3276	III	—	Immobilizer Control Module Control	5	0.35	GY / BK	3276	IV	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	RD / WH	1340	III	—	Battery Positive Voltage	7	—	—	—	—	—
8	0.35	GN / WH	4115	III	—	Body Control Module LIN Bus 5	8	—	—	—	—	—

X348 Body Harness to Front Center Seat Harness (AZ3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.35	VT / YE	143	III	—	Accessory Ignition Voltage	9	0.5	VT / YE	143	IV	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.35	VT	4601	III	—	Retained Accessory Power Control	11	—	—	—	—	—
12	0.35	GN	4512	III	—	Wireless Charging System Charge Indicator Control	12	—	—	—	—	—
13	0.35	GY / BK	3555	III	—	Interior Passive Entry Antenna 2 Low Signal	13	0.5	GY / BK	3555	IV	—
14	0.35	BU	3554	III	—	Interior Passive Entry Antenna 2 High Signal	14	0.5	BU	3554	IV	—
15	1.5	RD / WH	1040	II	—	Battery Positive Voltage	15	1.5	RD / WH	1040	V	—
16	0.5	WH / BN	6815	I	—	Inadvertent Load Control	16	—	—	—	—	—
17 - 18	—	—	—	—	—	Not Occupied	17 - 18	—	—	—	—	—
19	0.35	BN	4511	III	—	Wireless Charging System Fault Indicator Control	19	—	—	—	—	—
20	2	BK	1250	II	—	Ground	20	2	BK	1150	V	—

X370 Body Harness to Rear Seat Harness (KA6)



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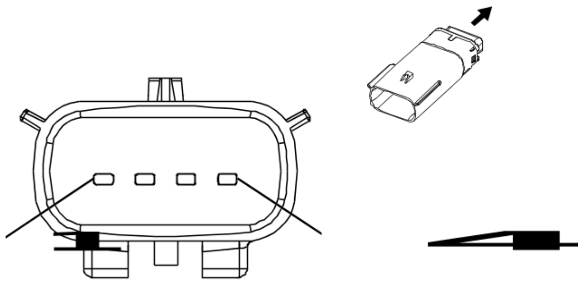


2917338

Connector Part Information

Harness Type: Body
OEM Connector: 15514524
Service Connector: 19355605
Description: 4 <p01>-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 33481-4401
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way M 1.5 Series, Sealed(BK)

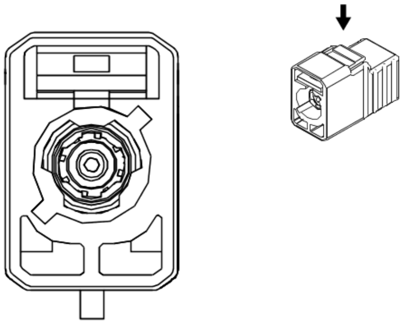
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X370 Body Harness to Rear Seat Harness (KA6)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD / YE	240	I	—	Battery Positive Voltage	1	0.75	RD / YE	240	II	—
2	0.5	RD / VT	340	I	—	Battery Positive Voltage	2	0.75	RD / VT	340	II	—
3	0.35	GN / BU	6133	I	—	Body Control Module LIN Bus 2	3	0.5	GN / BU	6133	II	—
4	1	BK	1150	I	—	Ground	4	1	BK	1150	II	—

X379 Inside Rearview Mirror Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)



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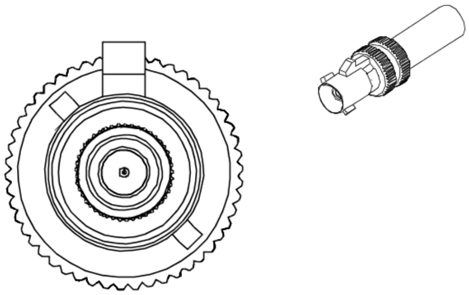


4249257

Connector Part Information

Harness Type: Inside Rearview Mirror Jumper COAX

OEM Connector: 13583914

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type(BU)

Connector Part Information

Harness Type: Inside Rearview Mirror Jumper COAX

OEM Connector: 13583912

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way M Coax Type(BU)

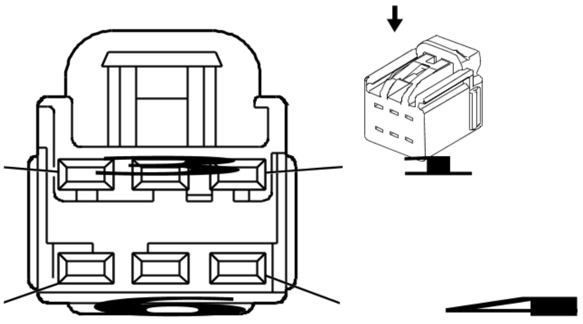
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X379 Inside Rearview Mirror Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Full Display Mirror Rear Camera Co-axial Video Signal	—	—	Coax Cable	—	I	—

X380 Center High Mount Stop Lamp Jumper Harness to Headliner Harness (9L7)



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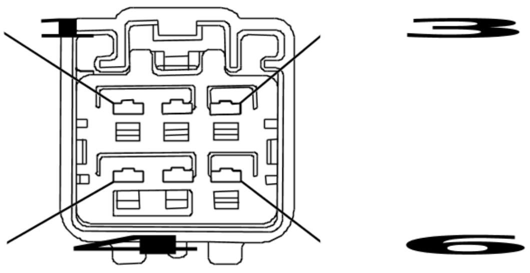


1849802

Connector Part Information

Harness Type: Center High Mount Stop Lamp Jumper
OEM Connector: 10847014
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F YESC Kaizen Series(L-GY)

Connector Part Information

Harness Type: Headliner
OEM Connector: 10847012
Service Connector: 84727361
Description: 6 <p01>-Way M YESC Kaizen Series(L-GY)

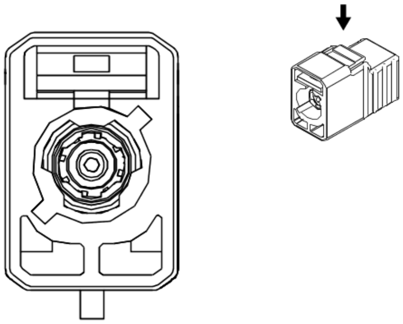
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X380 Center High Mount Stop Lamp Jumper Harness to Headliner Harness (9L7)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	WH / VT	1430	I	—	Exterior Courtesy Lamp Control	1	0.35	WH / VT	1430	II	—
2	0.35	VT / WH	5065	I	—	Stop Lamp Relay Coil Control	2	0.5	VT / WH	5065	II	—
3	0.35	BK	1050	I	—	Ground	3	0.5	BK	1050	II	—
4	2.5	GN / BU	5989	I	—	Emergency Vehicle Lamp Relay Control	4	2.5	GN / BU	5989	II	—
5	2.5	BK	1050	I	—	Ground	5	2.5	BK	1050	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X381 Inside Rearview Mirror Jumper Harness to Center High Mounted Stop Lamp Jumper Harness (DRZ)



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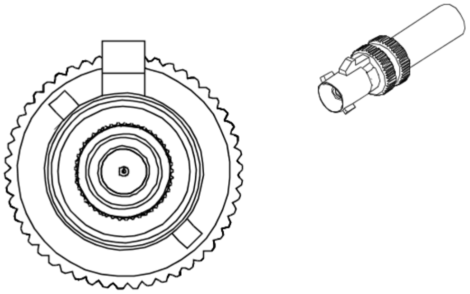


4249257

Connector Part Information

Harness Type: Inside Rearview Mirror Jumper COAX

OEM Connector: 13583914

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way F Coax Type(BU)

Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper COAX

OEM Connector: 13583912

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1 <p01>-Way M Coax Type(BU)

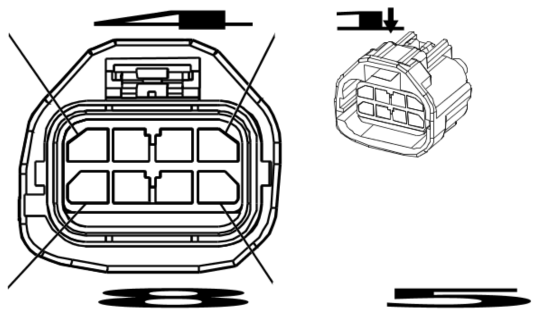
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X381 Inside Rearview Mirror Jumper Harness to Center High Mounted Stop Lamp Jumper Harness (DRZ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Full Display Mirror Rear Camera Co-axial Video Signal	—	—	Coax Cable	—	I	—

X408 Left Side Assist Step Jumper Harness to Chassis Harness (BRS)



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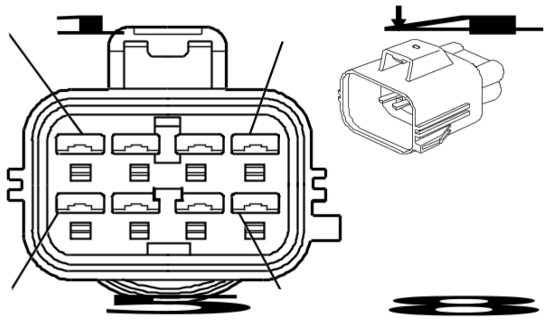


1856785

Connector Part Information

Harness Type: Left Side Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8 <p01>-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 7282-5574-10
Service Connector: 19367561
Description: 8 <p01>-Way M 2.8 Series, Sealed(D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

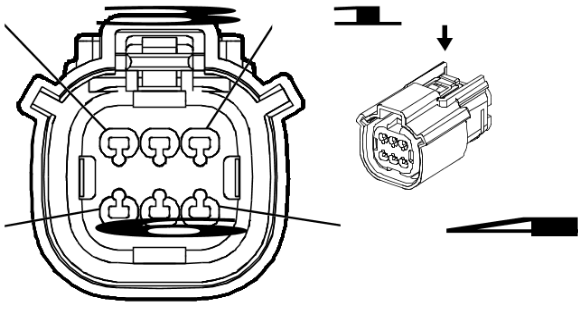
X408 Left Side Assist Step Jumper Harness to Chassis Harness (BRS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	GY	7472	I	—	Left Running Board Step Motor Control Retract	1	2	GY	7472	II	—
2	0.5	VT / RD	7468	I	—	Left Running Board Step Motor Hall Sensor 5V Reference	2	0.5	VT / RD	7468	II	—
3	0.5	YE	7467	I	—	Left Running Board Step Motor Hall Sensor Signal	3	0.5	YE	7467	II	—
4	0.5	YE / BN	7466	I	—	Left Running Board Step Motor Hall Sensor Low Reference	4	0.5	YE / BN	7466	II	—
5	2	WH / BN	7471	I	—	Left Running Board Step Motor Control Extend	5	2	WH / BN	7471	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X408 Left Side Assist Step Jumper Harness to Chassis Harness (BRS) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	BU / GN	4746	I	—	Running Board Step Left Kick Switch Signal	7	0.5	BU / GN	4746	II	—
8	0.5	BK / BU	685	I	—	Running Board Step Kick Switch Feedback Signal	8	0.5	BK / BU	685	II	—

X410 Left Tail Lamp Harness to Chassis Harness



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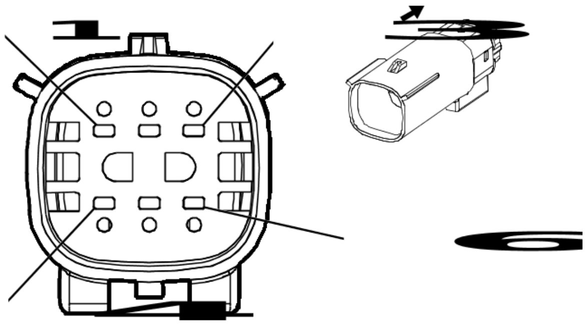


1986159

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 33482-3601
Service Connector: 19367742
Description: 6 <p01>-Way M 1.5 MX Series, Sealed(BK)

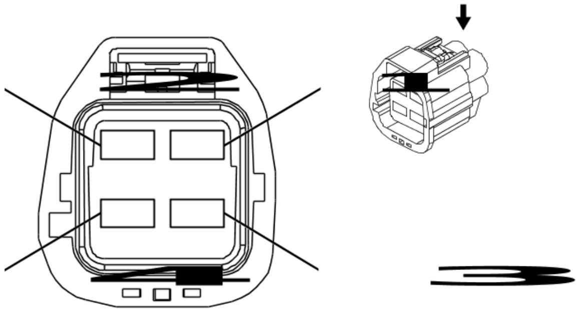
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X410 Left Tail Lamp Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	VT / GY	709	I	—	Left Park Lamp Control	1	0.75	VT / GY	709	II	—
2	0.5	YE / BK	5356	I	—	Left Tail Lamp Outage Detection Signal	2	0.5	YE / BK	5356	II	—
3	0.5	GY / BU	7762	I	—	Cargo Lamp Control	3	0.5	GY / BU	7762	II	—
4	0.5	GN / WH	24	I	—	Backup Lamp Control	4	0.5	GN / WH	24	II	—
5	1	YE / BU	18	I	—	Left Rear Stop/Turn Signal Lamp Control	5	1	YE / BU	18	II	—
6	1	BK	1450	I	—	Ground	6	1	BK	1450	II	—

X415 Rear Axle Harness to Chassis Harness



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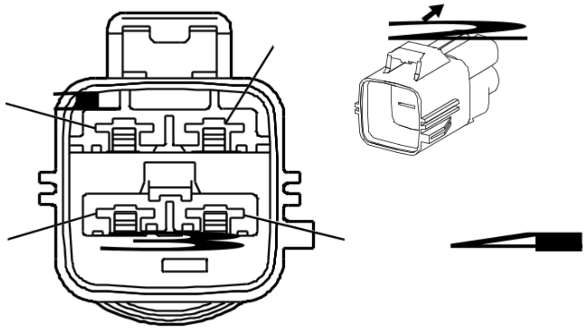


1853524

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 7283-3601-10
Service Connector: Service by Harness - See Part Catalog
Description: 4 <p01>-Way F 6.3 Series, Sealed(GY)

Connector Part Information

Harness Type: Chassis
OEM Connector: 7288-3029-10
Service Connector: 19371198
Description: 4 <p01>-Way M 6.3 Series, Sealed(GY)

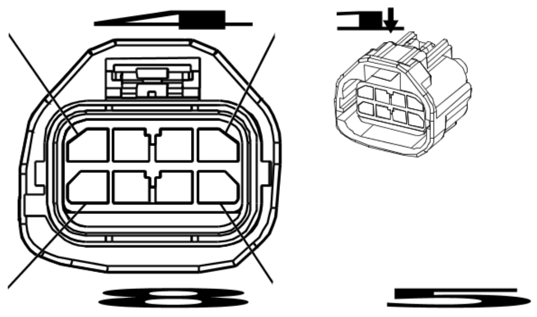
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-43 (RD)	No Tool Required

X415 Rear Axle Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	WH	2001	I	—	Left Park Brake Motor Apply Control Left Park Brake Motor Apply Control	1	5	WH	2001	II	—
2	2.5	GY / BK	4369	I	—	Left Park Brake Motor Low Reference Left Park Brake Motor Low Reference	2	5	GY / BK	4369	II	—
3	2.5	GN / VT	1988	I	—	Right Park Brake Motor Apply Control Right Park Brake Motor Apply Control	3	5	GN / VT	1988	II	—
4	2.5	GY	4368	I	—	Right Park Brake Motor Low Reference Right Park Brake Motor Low Reference	4	5	GY	4368	II	—

X418 Right Side Assist Step Jumper Harness to Chassis Harness (BRS)



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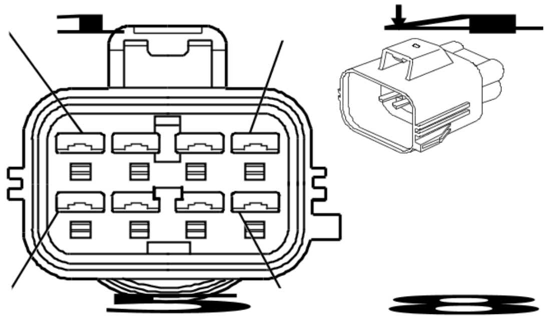


1856785

Connector Part Information

Harness Type: Right Side Assist Step Jumper

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 8 <p01>-Way F

Connector Part Information

Harness Type: Chassis

OEM Connector: 7282-5574-10

Service Connector: 19367561

Description: 8 <p01>-Way M 2.8 Series, Sealed(D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

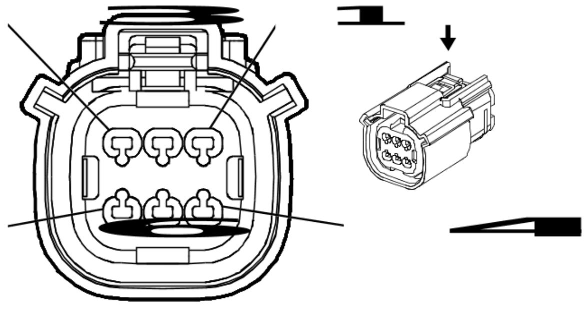
X418 Right Side Assist Step Jumper Harness to Chassis Harness (BRS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	GN	7469	I	—	Right Left Running Board Step Motor Control Retract Right Left Running Board Step Motor Control Retract	1	2	GN	7469	II	—
2	0.5	GN / RD	7464	I	—	Right Running Board Step Motor Hall Sensor 5V Reference	2	0.5	GN / RD	7464	II	—
3	0.5	VT	7465	I	—	Right Running Board Step Motor Hall Sensor Signal	3	0.5	VT	7465	II	—
4	0.5	YE / BK	7463	I	—	Right Running Board Step Motor Hall Sensor Low Reference	4	0.5	YE / BK	7463	II	—

X418 Right Side Assist Step Jumper Harness to Chassis Harness (BRS) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	2	BU	7470	I	—	Right Running Board Step Motor Control Extend Right Running Board Step Motor Control Extend	5	2	BU	7470	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	WH	4747	I	—	Running Board Step Right Kick Switch Signal	7	0.5	WH	4747	II	—
8	0.5	BK / BU	685	I	—	Running Board Step Kick Switch Feedback Signal	8	0.5	BK / BU	685	II	—

X420 Right Tail Lamp Harness to Chassis Harness



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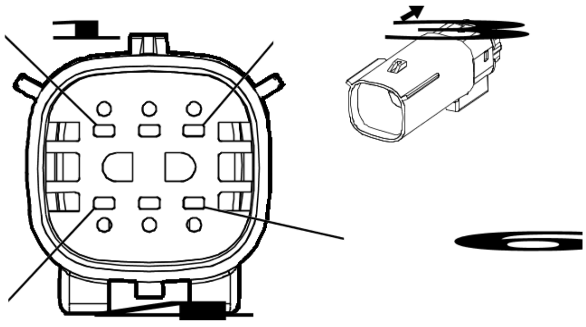


1986159

Connector Part Information

Harness Type: Right Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 33482-3601
Service Connector: 19367742
Description: 6 <p01>-Way M 1.5 MX Series, Sealed(BK)

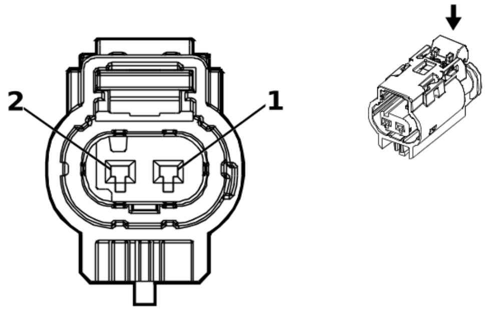
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X420 Right Tail Lamp Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	GY / BN	309	I	—	Right Park Lamp Control	1	0.75	GY / BN	309	II	—
2	0.5	VT / YE	5357	I	—	Right Tail Lamp Outage Detection Signal	2	0.5	VT / YE	5357	II	—
3	0.5	GY / BU	7762	I	—	Cargo Lamp Control	3	0.5	GY / BU	7762	II	—
4	0.5	GN / WH	24	I	—	Backup Lamp Control	4	0.5	GN / WH	24	II	—
5	1	BN / GN	19	I	—	Right Rear Stop/Turn Signal Lamp Control	5	1	BN / GN	19	II	—
6	0.75	BK	1750	I	—	Ground	6	0.75	BK	1750	II	—

X436 Rear Axle Harness to Chassis Harness (-Z45)



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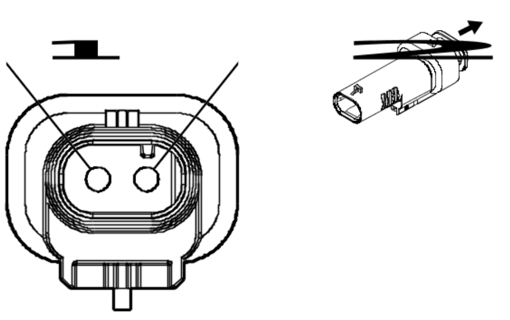


4992757

Connector Part Information

Harness Type: Rear Axle

OEM Connector: 13583199

Service Connector: Service by Harness - See Part Catalog

Description: 2 <p01>-Way F 1.2 Multilock Series, Sealed(GY)

Connector Part Information

Harness Type: Chassis

OEM Connector: 10094251

Service Connector: 19371200

Description: 2 <p01>-Way M 1.2 MLK Series, Sealed(GY)

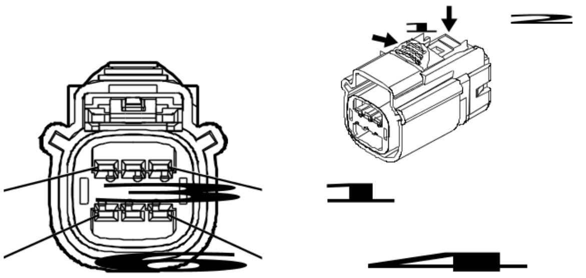
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

X436 Rear Axle Harness to Chassis Harness (-Z45)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	GN / YE	1616	I	—	Rear Brake Pad Wear Sensor Signal Rear Brake Pad Wear Sensor Signal	1	0.5	GN / YE	1616	II	—
2	0.75	BK / WH	1751	I	—	Signal Ground Signal Ground	2	0.5	BK / WH	1751	II	—

X436 Chassis Harness to Rear Axle Harness (Z45)



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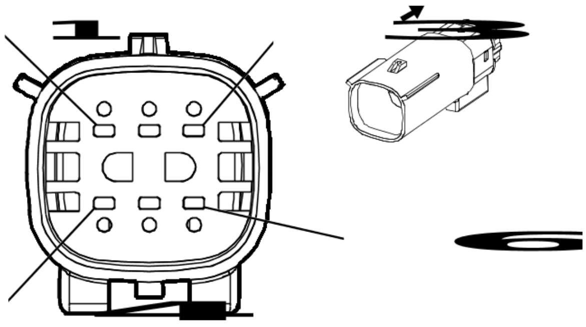


1986159

Connector Part Information

Harness Type: Chassis
OEM Connector: 15513504
Service Connector: 84999473
Description: 6 <p01>-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Rear Axle
OEM Connector: 33482-3601
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way M 1.5 MX Series, Sealed(BK)

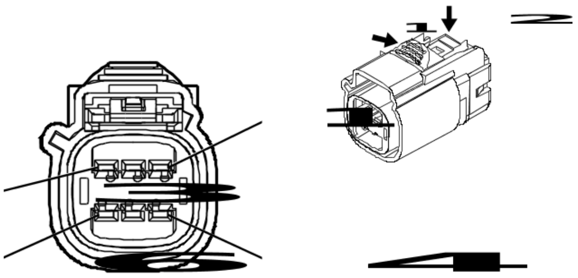
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-14 (GN)	No Tool Required

X436 Chassis Harness to Rear Axle Harness (Z45)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BU / GY	1114	I	—	Left Rear Shock Absorber Actuator Control	1	0.75	BU / GY	1114	II	—
2	0.5	GN / YE	1616	I	—	Rear Brake Pad Wear Sensor Signal	2	0.75	GN / YE	1616	II	—
3	0.75	BN / GN	1118	I	—	Right Rear Shock Absorber Actuator Control	3	0.75	BN / GN	1118	II	—
4	0.75	GN / VT	1115	I	—	Left Rear Shock Absorber Actuator Control	4	0.75	GN / VT	1115	II	—
5	0.5	BK / WH	1751	I	—	Signal Ground	5	0.75	BK / WH	1751	II	—
6	0.75	GN / GY	1119	I	—	Right Rear Shock Absorber Actuator Control	6	0.75	GN / GY	1119	II	—

X450 Power Inverter Module Jumper Harness to Chassis Harness



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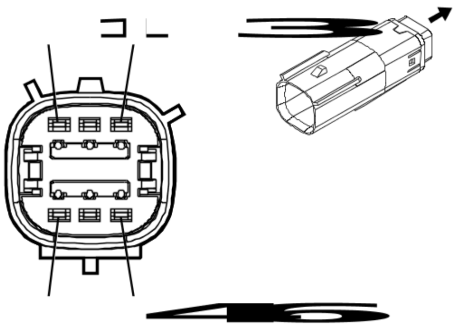


4992963

Connector Part Information

Harness Type: Power Inverter Module Jumper
OEM Connector: 15513505
Service Connector: Service by Harness - See Part Catalog
Description: 6 <p01>-Way F 1.5 OCS Series, Sealed(GY)

Connector Part Information

Harness Type: Chassis
OEM Connector: 15513475
Service Connector: 19371205
Description: 6 <p01>-Way M 1.5 OCS Series, Sealed(GY)

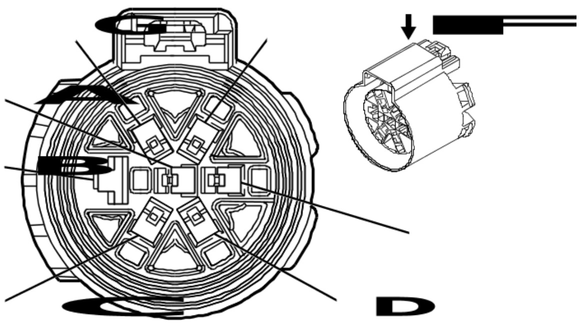
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X450 Power Inverter Module Jumper Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK / WH	2264	I	—	120V AC Phase A 2	1	0.75	BK / WH	2264	II	—
2	0.75	RD / WH	2265	I	—	120V AC Phase B 2	2	0.75	RD / WH	2265	II	—
3	0.5	GN	2257	I	—	Low Reference	3	—	—	—	—	—
4	0.75	GN / BN	2266	I	—	DC/AC Inverter Control 2	4	0.75	GN / BN	2266	II	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	1	BK	6650	I	—	Ground	6	1	BK	6650	II	—

X480 Chassis Harness to Back Up Alarm Harness (8S3)



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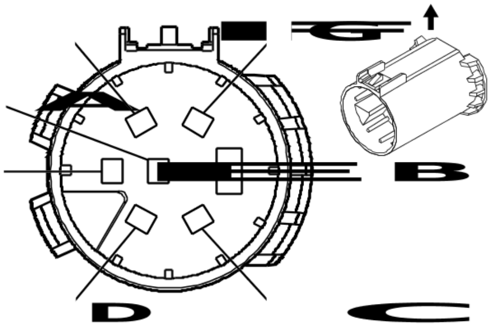


366087

Connector Part Information

Harness Type: Chassis

OEM Connector: 13857223

Service Connector: 15306164

Description: 7 <p01>-Way F 280, 630 Metri-Pack Series, Sealed(BK)

Connector Part Information

Harness Type: Back Up Alarm

OEM Connector: 15317327

Service Connector: Service by Harness - See Part Catalog

Description: 7 <p01>-Way M 280 Metri-Pack Series, Sealed(BK)

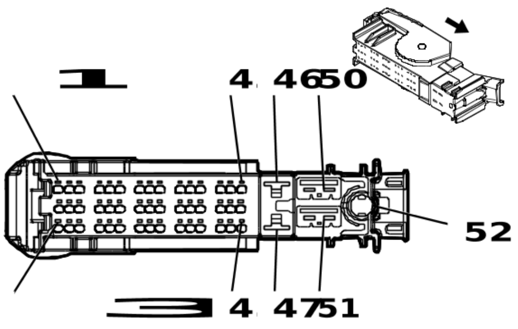
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-43 (RD)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

X480 Chassis Harness to Back Up Alarm Harness (8S3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.75	WH / GN	1624	II	—	Trailer Back-up Lamp Control	A	1	GN	1624	IV	—
B	5	WH	22	I	—	Trailer Ground	B	5	WH	22	III	—
C	2.5	BU	47	II	—	Trailer Auxiliary Control	C	3	BU	47	IV	—
D	0.75	GN / VT	1619	II	—	Right Rear Trailer Stop/ Turn Lamp Control	D	0.8	GN	1619	IV	—
E	4	RD / GN	742	II	—	Battery Positive Voltage	E	3	RD / BK	742	IV	—
F	—	—	—	—	—	Not Occupied	F	—	—	—	—	—
G	0.75	YE / BU	318	II	—	Left Rear Trailer Stop/ Turn Lamp Control	G	0.8	YE	1618	IV	—

X500 Driver Door Harness to Body Harness



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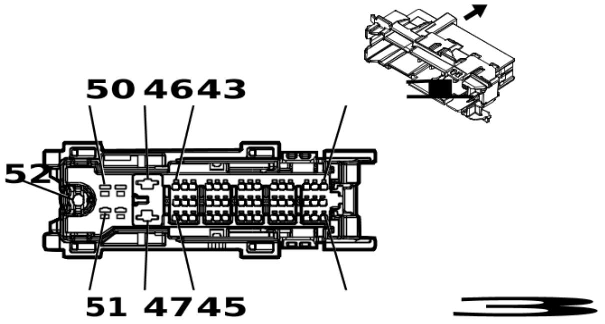


4993484

Connector Part Information

Harness Type: Driver Door

OEM Connector: 6098-8365

Service Connector: Service by Harness - See Part Catalog

Description: 52 <p01>-Way F 1.2, 2.8, 6.3, Coaxial Series(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35190453

Service Connector: 13527236

Description: 52 <p01>-Way M 1.2, 2.8, 6.3, Coaxial Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	No Tool Required	No Tool Required
IV	19301536	J-35616-42 (RD)	J-38125-11A
V	19301536	J-35616-43 (RD)	J-38125-11A
VI	84888592	J-35616-5 (PU)	J-38125-11A
VII	Service by Cable	No Tool Required	J-38125-12A

X500 Driver Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	GY / YE	1760	I	—	Left Side Object Detection LED Control	2	0.35	GY / YE	1760	IV	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	0.5	WH / VT	968	I	—	Configurable Provision Relay 4 Voltage	4	0.35	WH / VT	968	IV	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.5	YE / VT	3397	I	—	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	6	0.5	YE / VT	3397	IV	—

X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	WH	3398	I	—	Passenger Outside Rearview Mirror Motor Common Control	7	0.5	WH	3398	IV	—
8	0.5	GN / BK	3396	I	—	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	8	0.5	GN / BK	3396	IV	—
9	0.5	BU	2082	I	—	Puddle Lamp Control	9	0.35	BU	2082	IV	—
10	0.5	BK / BU	5978	I	—	Memory Switch Low Reference	10	0.35	BK / BU	5978	IV	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	WH	615	I	—	Seat Memory Switch Signal 1	12	0.35	WH	615	IV	—
13	0.5	BN / WH	781	I	—	Driver Door Lock Switch Unlock Signal	13	0.35	BN / WH	781	IV	—
14	0.5	BN / YE	2267	I	—	Outside Rearview Mirror Heater Control	14	0.5	BN / YE	2267	IV	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.5	BU / GN	614	I	—	Seat Memory Switch Set Signal	16	0.35	BU / GN	614	IV	—
17 - 18	—	—	—	—	—	Not Occupied	17 - 18	—	—	—	—	—
19	0.35	WH / YE	7557	I	—	Interior Door Handle Accent Lighting Control	19	0.35	WH / YE	7557	IV	—
20	0.5	GN / WH	3570	I	—	Driver Door Handle Switch Signal	20	0.35	GN / WH	3570	IV	—
21	0.5	WH / YE	3574	I	—	Driver Door Open Switch Signal	21	0.35	WH / YE	3574	IV	—
22	0.5	BU / WH	1314	I	—	Left Front Turn Signal Lamp Control	22	0.35	BU / WH	1314	IV	—
23	0.5	GY	745	I	—	Left Front Door Ajar Switch Signal	23	0.35	GY	745	IV	—
24	—	—	—	—	—	Not Occupied	24	—	—	—	—	—

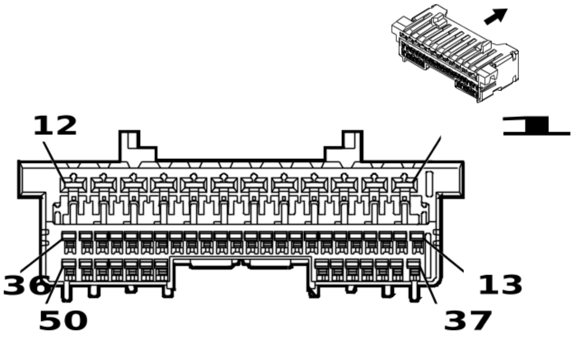
X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.75	OG / GN	2132	I	—	Left Front Side Impact Sensor Signal	25	0.35	OG / GN	2132	IV	—
26	0.5	YE / WH	1690	I	—	Mirror Dimming Signal	26	0.35	YE / WH	1690	IV	—
27	0.5	GY / GN	5996	I	—	Driver Outside Rearview Mirror Courtesy Lamp Control	27	0.35	GY / GN	5996	IV	—
28	0.75	BK / OG	6628	I	—	Left Front Side Impact Sensor Low Reference	28	0.35	BK / OG	6628	IV	—
29	0.35	BN / YE	780	I	—	Driver Door Lock Switch Lock Signal	29	0.35	BN / YE	780	IV	—
30	0.5	RD / VT	1940	I	—	Battery Positive Voltage	30	0.35	RD / VT	1940	IV	—
31	0.5	VT / GY	3561	I	—	Driver Door Passive Entry Antenna Low Signal	31	0.5	VT / GY	3561	IV	—
32	0.5	VT	3560	I	—	Driver Door Passive Entry Antenna High Signal	32	0.5	VT	3560	IV	—
33	0.5	BU / VT	1124	I	—	Door Lock Key Switch Unlock Signal	33	0.35	BU / VT	1124	IV	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	GN / YE	6134	I	—	Body Control Module LIN Bus 3	35	0.35	GN / YE	6134	IV	—
36 - 41	—	—	—	—	—	Not Occupied	36 - 41	—	—	—	—	—
42	0.5	VT / GY	709	I	—	Left Park Lamp Control	42	0.5	VT / GY	709	IV	—
43	0.5	YE	6817	I	—	LED Backlight Dimming Control 1	43	0.35	YE	6817	IV	—
44	0.5	GN / WH	7530	I	—	Driver Seat Memory Control Module LIN Bus 1	44	0.35	GN / WH	7530	IV	—
45	0.5	BK / YE	1691	I	—	Automatic Day/Night Mirror Low Reference	45	0.35	BK / YE	1691	IV	—
46	3	BK	1150	I	—	Ground	46	3	BK	1150	V	—
47	2.5	RD / BU	1842	II	AXG	Battery Positive Voltage	47	2.5	RD / BU	1842	V	AXG
48	0.75	BN / YE	294	I	—	Door Lock Actuator Unlock Control	48	0.75	BN / YE	294	VI	—

X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
49	0.75	GY	5911	I	—	Door Lock Actuator Lock Control 2	49	0.75	GY	5911	VI	—
50	0.75	BN / BU	118	I	—	Left Front Speaker [-] Control 1	50	0.75	BN / BU	118	VI	—
51	0.75	BU	201	I	—	Left Front Speaker 1 [+] Control	51	0.75	BU	201	VI	—
52	0	Bare	2628	III	—	Left Sideview Camera Video Signal [+]	52	0	Bare	2628	VII	—

X505 Driver Door Harness to Driver Door Trim Harness



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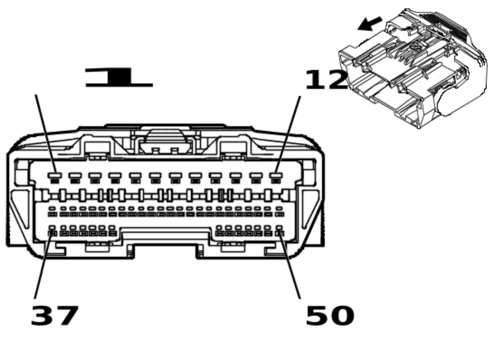


5022037

Connector Part Information

Harness Type: Driver Door
OEM Connector: 33390107
Service Connector: Service by Harness - See Part Catalog
Description: 50 <p01>-Way F 1.2, 2.8 OCS Series(BK)

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 33390111
Service Connector: Service by Harness - See Part Catalog
Description: 50 <p01>-Way M 1.2, 2.8 OCS Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-17 (LT GN)	No Tool Required

X505 Driver Door Harness to Driver Door Trim Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 12	—	—	—	—	—	Not Occupied	1 - 12	—	—	—	—	—
13	0.5	GN / WH	7530	I	—	Driver Seat Memory Control Module LIN Bus 1	13	0.5	GN / WH	7530	II	—
14	0.5	BK / BN	3393	I	—	Driver Outside Rearview Mirror Position Sensor Low Reference	14	0.35	BK / BN	3393	II	—
15	0.5	BU / VT	1124	I	—	Door Lock Key Switch Unlock Signal	15	0.35	BU / VT	1124	II	—
16	0.35	GN / WH	3379	I	—	Window Switch Driver Up Signal	16	0.5	GN / WH	3379	II	—
17	0.5	RD / VT	1940	I	—	Battery Positive Voltage	17	0.5	RD / VT	1940	II	—
18	0.35	GN	3381	I	—	Window Switch Driver Express Signal	18	0.35	GN	3381	II	—

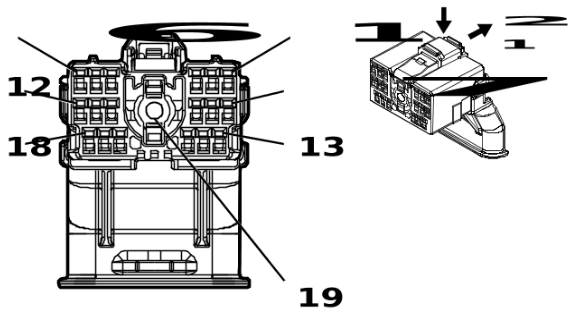
X505 Driver Door Harness to Driver Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
19	0.5	WH	3398	I	—	Passenger Outside Rearview Mirror Motor Common Control	19	0.5	WH	3398	II	—
20	0.35	WH / YE	7557	I	—	Interior Door Handle Accent Lighting Control	20	0.35	WH / YE	7557	II	—
21	0.5	BN / BK	3389	I	A45/ DZC	Driver Outside Rearview Mirror Motor Right [+] Left [-] Control	21	—	—	—	—	—
22	0.5	WH / YE	3395	I	—	Driver Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal	22	0.35	WH / YE	3395	II	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.35	WH / GN	3412	I	—	Driver Outside Rearview Mirror Motor Fold Control	24	0.35	WH / GN	3412	II	—
25	0.35	WH / VT	3270	I	—	Driver Door Lock Motor Status Signal	25	0.35	WH / VT	3270	II	—
26	0.35	GY / BN	3394	I	—	Driver Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal	26	0.35	GY / BN	3394	II	—
27	0.5	GN / YE	6134	I	—	Body Control Module LIN Bus 3	27	0.5	GN / YE	6134	II	—
28	0.35	YE / BN	3391	I	—	Driver Mirror Motor Common Control	28	0.35	YE / BN	3391	II	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	0.75	BK	1150	I	—	Ground	30	0.5	BK	1150	II	—
31	0.35	GY / WH	3411	I	—	Driver Outside Rearview Mirror Motor Unfold Control	31	0.35	GY / WH	3411	II	—
32	—	—	—	—	—	Not Occupied	32	—	—	—	—	—
33	0.35	VT / BU	3390	I	—	Driver Outside Rearview Mirror Motor Up [+] Down [-] Control	33	0.35	VT / BU	3390	II	—

X505 Driver Door Harness to Driver Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
34	0.5	WH	615	I	—	Seat Memory Switch Signal 1	34	0.35	WH	615	II	—
35	—	—	—	—	—	Not Occupied	35	—	—	—	—	—
36	0.5	YE	6817	I	—	LED Backlight Dimming Control 1	36	0.5	YE	6817	II	—
37	—	—	—	—	—	Not Occupied	37	—	—	—	—	—
38	0.35	VT / RD	3392	I	—	Driver Outside Rearview Mirror Position Sensor 5V Reference	38	0.5	VT / RD	3392	II	—
39	0.5	BN / WH	781	I	—	Driver Door Lock Switch Unlock Signal	39	0.35	BN / WH	781	II	—
40	0.5	GN / BK	3396	I	—	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	40	0.35	GN / BK	3396	II	—
41	0.5	YE / VT	3397	I	—	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	41	0.35	YE / VT	3397	II	—
42	0.5	GY	3380	I	—	Driver Window Main Control Down Switch Signal	42	0.5	GY	3380	II	—
43	0.5	BU / GN	614	I	—	Seat Memory Switch Set Signal	43	0.35	BU / GN	614	II	—
44	—	—	—	—	—	Not Occupied	44	—	—	—	—	—
45	0.5	BK / BU	5978	I	—	Memory Switch Low Reference	45	0.35	BK / BU	5978	II	—
46	—	—	—	—	—	Not Occupied	46	—	—	—	—	—
47	0.35	BN / YE	780	I	—	Driver Door Lock Switch Lock Signal	47	0.5	BN / YE	780	II	—
48 - 50	—	—	—	—	—	Not Occupied	48 - 50	—	—	—	—	—

X510 Driver Door Harness to Driver Outside Rearview Mirror Harness



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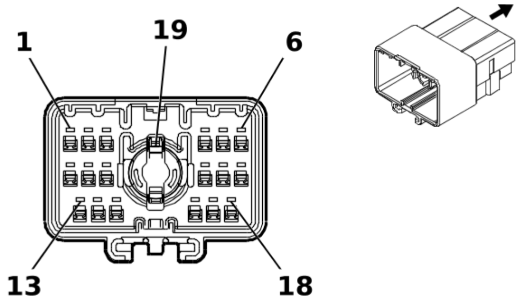


4969165

Connector Part Information

Harness Type: Driver Door

OEM Connector: 35077331

Service Connector: Service by Harness - See Part Catalog

Description: 19 <p01>-Way F 1.2 MCON, Coaxial Series(BK)

Connector Part Information

Harness Type: Driver Outside Rearview Mirror

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 19 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required
III	Not required	J-35616-17 (LT GN)	No Tool Required

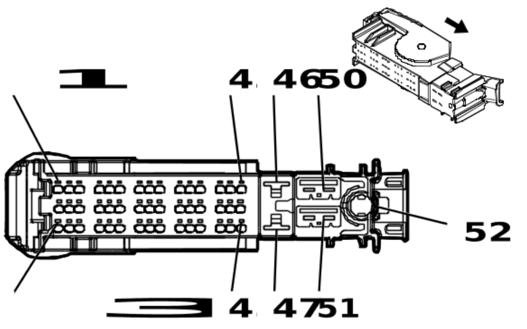
X510 Driver Door Harness to Driver Outside Rearview Mirror Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN / BK	3389	I	—	Driver Outside Rearview Mirror Motor Right [+] Left [-] Control	1	0.35	BN / BK	3389	III	—
2	0.35	VT / BU	3390	I	—	Driver Outside Rearview Mirror Motor Up [+] Down [-] Control	2	0.35	VT / BU	3390	III	—
3	0.35	WH / GN	3412	I	—	Driver Outside Rearview Mirror Motor Fold Control	3	0.35	WH / GN	3412	III	—
4	0.5	GY / YE	1760	I	—	Left Side Object Detection LED Control	4	0.5	GY / YE	1760	III	—
5	0.5	GY / GN	5996	I	—	Driver Outside Rearview Mirror Courtesy Lamp Control	5	0.5	GY / GN	5996	III	—

X510 Driver Door Harness to Driver Outside Rearview Mirror Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	WH / YE	3395	I	—	Driver Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal	6	0.5	WH / YE	3395	III	—
7	0.5	BN / YE	2267	I	—	Outside Rearview Mirror Heater Control	7	0.5	BN / YE	2267	III	—
8	0.5	BU / WH	1314	I	—	Left Front Turn Signal Lamp Control	8	0.5	BU / WH	1314	III	—
9	0.75	BK	1150	I	—	Ground	9	0.75	BK	1150	III	—
10	0.35	VT / RD	3392	I	—	Driver Outside Rearview Mirror Position Sensor 5V Reference	10	0.35	VT / RD	3392	III	—
11	0.35	GY / BN	3394	I	—	Driver Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal	11	0.35	GY / BN	3394	III	—
12	0.5	BK / YE	1691	I	—	Automatic Day/Night Mirror Low Reference	12	0.5	BK / YE	1691	III	—
13	0.5	VT / GY	709	I	—	Left Park Lamp Control	13	0.5	VT / GY	709	III	—
14	0.35	YE / BN	3391	I	—	Driver Mirror Motor Common Control	14	0.35	YE / BN	3391	III	—
15	0.35	GY / WH	3411	I	—	Driver Outside Rearview Mirror Motor Unfold Control	15	0.35	GY / WH	3411	III	—
16	0.5	WH / VT	968	I	—	—	16	0.5	WH / VT	968	III	—
17	0.5	YE / WH	1690	I	—	Mirror Dimming Signal	17	0.5	YE / WH	1690	III	—
18	0.5	BK / BN	3393	I	—	Driver Outside Rearview Mirror Position Sensor Low Reference	18	0.5	BK / BN	3393	III	—
19	0	Bare	2628	II	—	Left Sideview Camera Video Signal [+]	19	0	Bare	2628	III	—

X600 Passenger Door Harness to Body Harness



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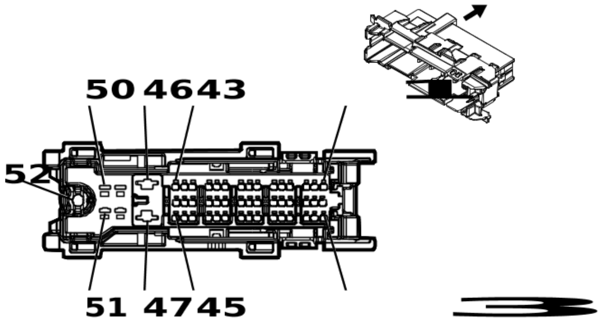


4993484

Connector Part Information

Harness Type: Passenger Door

OEM Connector: 35077349

Service Connector: Service by Harness - See Part Catalog

Description: 52 <p01>-Way F 1.2, 2.8, 6.3, Coaxial Series(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35190453

Service Connector: 13527236

Description: 52 <p01>-Way M 1.2, 2.8, 6.3, Coaxial Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required
IV	Not required	No Tool Required	No Tool Required
V	19301536	J-35616-43 (RD)	J-38125-11A
VI	84616651	J-35616-17 (LT GN)	J-38125-215A
VII	84888592	J-35616-5 (PU)	J-38125-11A
VIII	Service by Cable	No Tool Required	J-38125-12A

X600 Passenger Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 3	—	—	—	—	—	Not Occupied	1 - 3	—	—	—	—	—
4	0.5	WH / VT	968	I	—	—	4	0.35	WH / VT	968	VI	—
5	0.5	GY	746	I	—	Right Front Door Ajar Switch Signal	5	0.35	GY	746	VI	—
6	0.5	YE / VT	3397	I	—	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	6	0.5	YE / VT	3397	VI	—
7	0.5	WH	3398	I	—	Passenger Outside Rearview Mirror Motor Common Control	7	0.5	WH	3398	VI	—

X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	GN / BK	3396	I	—	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	8	0.5	GN / BK	3396	VI	—
9	0.5	BU	2082	I	—	Puddle Lamp Control	9	0.35	BU	2082	VI	—
10 - 12	—	—	—	—	—	Not Occupied	10 - 12	—	—	—	—	—
13	0.5	BN / VT	245	I	—	Passenger Door Lock Switch Unlock Control	13	0.35	BN / VT	245	VI	—
14 - 18	—	—	—	—	—	Not Occupied	14 - 18	—	—	—	—	—
19	0.35	WH / YE	7557	I	—	Interior Door Handle Accent Lighting Control	19	0.35	WH / YE	7557	VI	—
20	0.5	VT / WH	3571	I	—	Passenger Door Handle Switch Signal	20	0.35	VT / WH	3571	VI	—
21	0.5	GY	1761	I	—	Right Side Object Detection LED Control	21	0.35	GY	1761	VI	—
22	0.5	GN / VT	1315	I	—	Right Front Turn Signal Lamp Control	22	0.35	GN / VT	1315	VI	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.35	BK	1150	I	—	Ground	24	0.5	BK	1150	VI	—
25	0.75	BN / OG	2134	I	—	Right Front Side Impact Sensor Signal	25	0.35	BN / OG	2134	VI	—
26	—	—	—	—	—	Not Occupied	26	—	—	—	—	—
27	0.5	GY / GN	5996	I	—	Driver Outside Rearview Mirror Courtesy Lamp Control	27	0.35	GY / GN	5996	VI	—
28	0.75	BK / OG	6629	I	—	Right Front Side Impact Sensor Low Reference	28	0.35	BK / OG	6629	VI	—
29	0.5	YE / VT	244	I	—	Passenger Door Lock Switch Lock Control	29	0.35	YE / VT	244	VI	—
30	—	—	—	—	—	Not Occupied	30	—	—	—	—	—

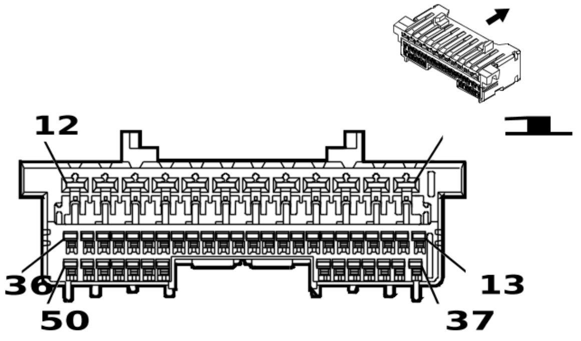
X600 Passenger Door Harness to Body Harness (cont'd)

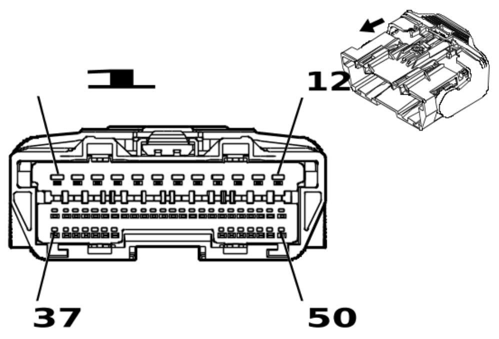
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
31	0.5	GN / BK	3563	I	—	Passenger Door Passive Entry Antenna Low Signal	31	0.5	GN / BK	3563	VI	—
32	0.5	GN / YE	3562	I	—	Passenger Door Passive Entry Antenna High Signal	32	0.5	GN / YE	3562	VI	—
33	—	—	—	—	—	Not Occupied	33	—	—	—	—	—
34	0.35	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	34	0.35	BK / GN	580	VI	—
35	0.5	GN / YE	6134	I	AED/ AEF	Body Control Module LIN Bus 3	35	0.35	GN / YE	6134	VI	AED/ AEF
36	0.35	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	36	0.35	BU / GY	636	VI	—
37	—	—	—	—	—	Not Occupied	37	—	—	—	—	—
38	0.5	BN / YE	2267	I	—	Outside Rearview Mirror Heater Control	38	0.5	BN / YE	2267	VI	—
39	0.5	GY / BN	309	I	—	Right Park Lamp Control	39	0.5	GY / BN	309	VI	—
40 - 42	—	—	—	—	—	Not Occupied	40 - 42	—	—	—	—	—
43	0.5	YE	6817	I	—	LED Backlight Dimming Control 1	43	0.35	YE	6817	VI	—
44	0.5	GN / WH	7530	I	—	Driver Seat Memory Control Module LIN Bus 1	44	0.35	GN / WH	7530	VI	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	3	BK	1250	II	—	Ground	46	3	BK	1250	V	—
47	2.5	RD / WH	1340	II	—	Battery Positive Voltage	47	2.5	RD / WH	1340	V	—
48	0.75	BN / YE	294	III	—	Door Lock Actuator Unlock Control	48	0.75	BN / YE	294	VII	—
49	0.75	GY	295	III	—	Door Lock Actuator Lock Control	49	0.75	GY	295	VII	—
50	0.75	YE / BK	117	III	—	Right Front Speaker [-] Control 1	50	0.75	YE / BK	117	VII	—
51	0.75	YE	200	III	—	Right Front Speaker 1 [+] Control	51	0.75	YE	200	VII	—

X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
52	0	Bare	2627	IV	—	Right Side-view Camera Video Signal [+]	52	0	Bare	2627	VIII	—

X605 Passenger Door Harness to Passenger Door Trim Harness





Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33390107
Service Connector: Service by Harness - See Part Catalog
Description: 50 <p01>-Way F 1.2, 2.8 OCS Series(BK)

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33390111
Service Connector: Service by Harness - See Part Catalog
Description: 50 <p01>-Way M 1.2, 2.8 OCS Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-17 (LT GN)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

X605 Passenger Door Harness to Passenger Door Trim Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	2.5	RD / WH	1340	II	—	Battery Positive Voltage	3	2.5	RD / WH	1340	IV	—
4 - 6	—	—	—	—	—	Not Occupied	4 - 6	—	—	—	—	—
7	2	GN / GY	3387	II	—	Passenger Window Motor Up Control	7	—	—	—	—	—
8	2	YE / BU	3388	II	—	Passenger Window Motor Down Control	8	—	—	—	—	—
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	2.5	BK	1250	II	—	Ground	10	3	BK	1250	IV	—
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—

X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
13	0.5	WH	3398	I	—	Passenger Outside Rearview Mirror Motor Common Control Passenger Outside Rearview Mirror Motor Common Control	13	0.5	WH	3398	III	—
14	0.5	VT / WH	3403	I	—	Passenger Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal Passenger Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal	14	0.35	VT / WH	3403	III	—
15	0.35	YE / VT	3397	I	—	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	15	0.35	YE / VT	3397	III	—
16	0.5	GN / BK	3396	I	—	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	16	0.35	GN / BK	3396	III	—
17	0.5	YE	6817	I	—	LED Backlight Dimming Control 1 LED Backlight Dimming Control 1	17	0.35	YE	6817	III	—

X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.5 0.35	BK / GN BK / GN	3400 3400	I I	A45 DZC	Passenger Outside Rearview Mirror Position Sensor Low Reference Passenger Outside Rearview Mirror Position Sensor Low Reference	18	0.35	BK / GN	3400	III	—
19	0.5	GN / WH	7530	I	—	Driver Seat Memory Control Module LIN Bus 1 Driver Seat Memory Control Module LIN Bus 1	19	0.35	GN / WH	7530	III	—
20	0.5	BN / VT	245	I	—	Passenger Door Lock Switch Unlock Control Passenger Door Lock Switch Unlock Control	20	0.35	BN / VT	245	III	—
21	0.35	YE / RD	3399	I	—	Passenger Outside Rearview Mirror Position Sensor Voltage Reference Passenger Outside Rearview Mirror Position Sensor Voltage Reference	21	0.35	YE / RD	3399	III	—
22	0.35	BK	1150	I	—	Ground	22	0.35	BK	1150	III	—
23	0.5	YE / VT	244	I	—	Passenger Door Lock Switch Lock Control Passenger Door Lock Switch Lock Control	23	0.35	YE / VT	244	III	—
24	0.35	WH / YE	7557	I	—	Interior Door Handle Accent Lighting Control Interior Door Handle Accent Lighting Control	24	0.35	WH / YE	7557	III	—

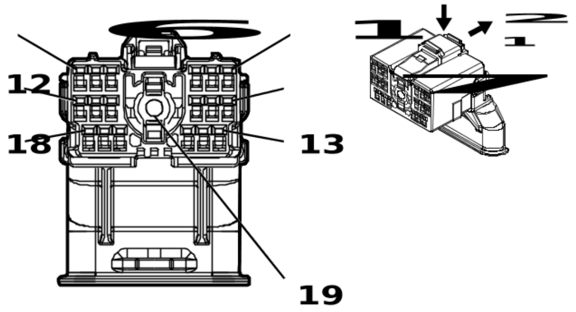
X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.35	YE / BK	3384	I	—	Window Switch Passenger Up Signal Window Switch Passenger Up Signal	25	0.5	YE / BK	3384	III	—
26	0.5	YE / WH	3413	I	—	Passenger Outside Rearview Mirror Motor Unfold Control Passenger Outside Rearview Mirror Motor Unfold Control	26	0.5	YE / WH	3413	III	—
27	0.5	BU / GY	3414	I	—	Passenger Outside Rearview Mirror Motor Fold Control Passenger Outside Rearview Mirror Motor Fold Control	27	0.5	BU / GY	3414	III	—
28	0.5	BN / YE	3385	I	—	Window Switch Passenger Down Signal Window Switch Passenger Down Signal	28	0.5	BN / YE	3385	III	—
29	0.5	GY	746	I	—	Right Front Door Ajar Switch Signal Right Front Door Ajar Switch Signal	29	0.5	GY	746	III	—
30	0.35	BU / YE	3401	I	—	Passenger Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal Passenger Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal	30	0.35	BU / YE	3401	III	—
31 - 33	—	—	—	—	—	Not Occupied	31 - 33	—	—	—	—	—

X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
34	0.35	VT / GY	3386	I	—	Window Switch Passenger Express Signal Window Switch Passenger Express Signal	34	0.35	VT / GY	3386	III	—
35						Body Control Module LIN Bus 3	35	0.35	GN / YE	6134	III	—
36 - 50	—	—	—	—	—	Not Occupied	36 - 50	—	—	—	—	—

X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness



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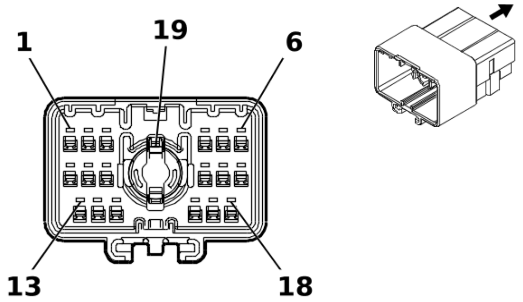


4969165

Connector Part Information

Harness Type: Passenger Door

OEM Connector: 35077331

Service Connector: Service by Harness - See Part Catalog

Description: 19 <p01>-Way F 1.2 MCON, Coaxial Series(BK)

Connector Part Information

Harness Type: Passenger Outside Rearview Mirror

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 19 <p01>-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required
III	Not required	J-35616-17 (LT GN)	No Tool Required
IV	Not required	No Tool Required	No Tool Required

X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN / BK	3396	I	—	Passenger Outside Rearview Mirror Motor Right [+] Left [-] Control	1	0.5	GN / BK	3396	III	—
2	0.35	YE / VT	3397	I	—	Passenger Outside Rearview Mirror Motor Up [+] Down [-] Control	2	0.5	YE / VT	3397	III	—
3	0.5	BU / GY	3414	I	—	Passenger Outside Rearview Mirror Motor Fold Control	3	0.5	BU / GY	3414	III	—
4	0.5	GY	1761	I	—	Right Side Object Detection LED Control	4	0.5	GY	1761	III	—
5	0.5	GY / GN	5996	I	—	Driver Outside Rearview Mirror Courtesy Lamp Control	5	0.5	GY / GN	5996	III	—

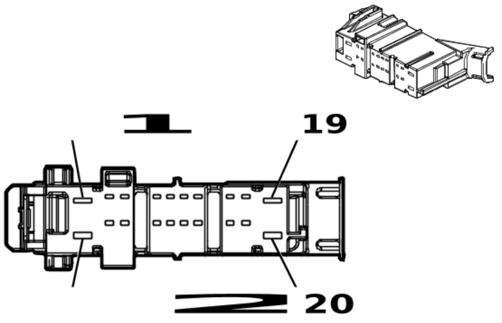
X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	VT / WH	3403	I	—	Passenger Outside Rearview Mirror Position Sensor Left [-] Right [+] Signal	6	0.5	VT / WH	3403	III	—
7	0.5	BN / YE	2267	I	—	Outside Rearview Mirror Heater Control	7	0.5	BN / YE	2267	III	—
8	0.5	GN / VT	1315	I	—	Right Front Turn Signal Lamp Control	8	0.5	GN / VT	1315	III	—
9	0.75	BK	1250	I	—	Ground	9	0.75	BK	1250	III	—
10	0.35	YE / RD	3399	I	—	Passenger Outside Rearview Mirror Position Sensor Voltage Reference	10	0.35	YE / RD	3399	III	—
11	0.35	BU / YE	3401	I	—	Passenger Outside Rearview Mirror Position Sensor Up [+] Down [-] Signal	11	0.35	BU / YE	3401	III	—
12	0.35	BK / GN	580	I	—	Engine Control Sensors Low Reference 2	12	0.35	BK / GN	580	III	—
13	0.5	GY / BN	309	I	—	Right Park Lamp Control	13	0.5	GY / BN	309	III	—
14	0.5	WH	3398	I	—	Passenger Outside Rearview Mirror Motor Common Control	14	0.5	WH	3398	III	—
15	0.5	YE / WH	3413	I	—	Passenger Outside Rearview Mirror Motor Unfold Control	15	0.5	YE / WH	3413	III	—
16	0.5	WH / VT	968	I	—	—	16	0.5	WH / VT	968	III	—
17	0.35	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	17	0.35	BU / GY	636	III	—

X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.35 0.5	BK / GN BK / GN	3400 3400	I I	A45 DZC	Passenger Outside Rearview Mirror Position Sensor Low Reference Passenger Outside Rearview Mirror Position Sensor Low Reference	18	0.5	BK / GN	3400	III	—
19	0	Bare	2627	II	—	Right Sideview Camera Video Signal [+]	19	0	—	2627	IV	—

X700 Left Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB)



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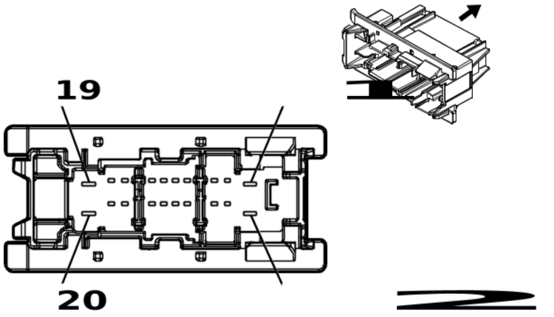


4663657

Connector Part Information

Harness Type: Left Rear Door

OEM Connector: 33303652

Service Connector: Service by Harness - See Part Catalog

Description: 20 <p01>-Way F 1.2 MCON, 2.8 MCP Series(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35215020

Service Connector: 13527239

Description: 20 <p01>-Way M 1.2 MCON, 2.8 MCP Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	13586064	J-35616-5 (PU)	J-38125-215A
IV	84616651	J-35616-17 (LT GN)	J-38125-215A

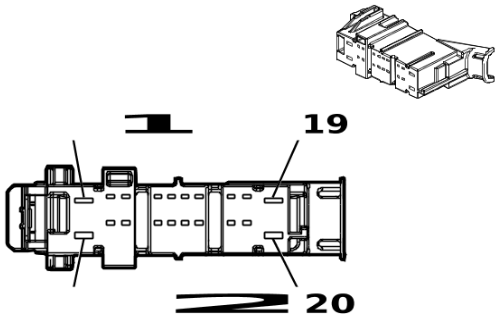
X700 Left Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / BU	1842	II	—	Battery Positive Voltage	1	2.5	RD / BU	1842	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.75	BN / YE	294	I	—	Door Lock Actuator Unlock Control	3	0.75	BN / YE	294	IV	—
4 - 5	—	—	—	—	—	Not Occupied	4 - 5	—	—	—	—	—
6	0.5	PK	6157	I	—	Left Rear Door Handle Switch Signal	6	0.35	BN / YE	6157	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	0.5	OG / BU	6622	I	—	Left Rear Side Impact Sensor Signal	9	0.35	OG / BU	6622	IV	—
10	0.5	BK / OG	6623	I	—	Left Rear Side Impact Sensor Low Reference	10	0.35	BK / OG	6623	IV	—

X700 Left Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	GN / GY	6135	I	—	Body Control Module LIN Bus 4	12	0.35	GN / GY	6135	IV	—
13	0.5	GN / BK	116	I	—	Left Rear Speaker [-] Control	13	0.5	GN / BK	116	IV	—
14	0.5	GN	199	I	—	Left Rear Speaker [+] Control	14	0.5	GN	199	IV	—
15 - 16	—	—	—	—	—	Not Occupied	15 - 16	—	—	—	—	—
17	0.75	GY	295	I	—	Door Lock Actuator Lock Control	17	0.75	GY	295	IV	—
18 - 19	—	—	—	—	—	Not Occupied	18 - 19	—	—	—	—	—
20	2.5	BK	1150	II	—	Ground	20	2.5	BK	1150	III	—

X800 Right Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB)



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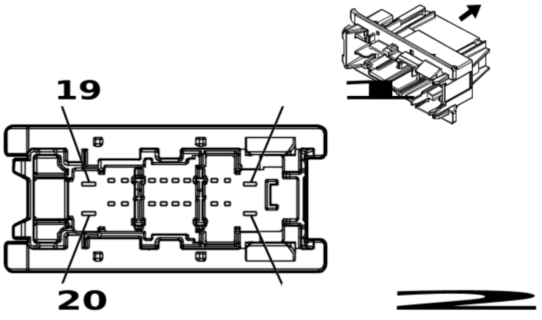


4663657

Connector Part Information

Harness Type: Right Rear Door

OEM Connector: 33303652

Service Connector: Service by Harness - See Part Catalog

Description: 20 <p01>-Way F 1.2 MCON, 2.8 MCP Series(BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35215020

Service Connector: 13527239

Description: 20 <p01>-Way M 1.2 MCON, 2.8 MCP Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	13586064	J-35616-5 (PU)	J-38125-215A
IV	84616651	J-35616-17 (LT GN)	J-38125-215A

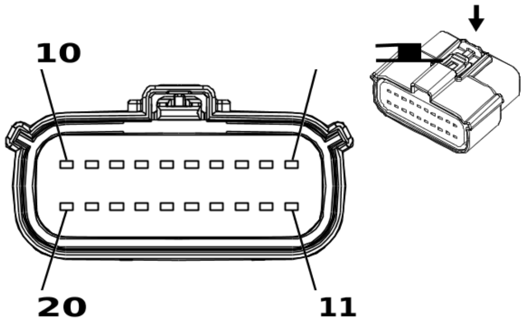
X800 Right Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / WH	1340	II	—	Battery Positive Voltage	1	2.5	RD / WH	1340	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.75	BN / YE	294	I	—	Door Lock Actuator Unlock Control	3	0.75	BN / YE	294	IV	—
4 - 5	—	—	—	—	—	Not Occupied	4 - 5	—	—	—	—	—
6	0.5	YE / GY	6158	I	—	Right Rear Door Handle Switch Signal	6	0.35	YE / GY	6158	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	0.5	OG / VT	6626	I	—	Right Rear Side Impact Sensor Signal	9	0.35	OG / WH	6626	IV	—
10	0.5	BK / OG	6627	I	—	Right Rear Side Impact Sensor Low Reference	10	0.35	BK / OG	6627	IV	—

X800 Right Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	GN / GY	6135	I	—	Body Control Module LIN Bus 4	12	0.35	GN / GY	6135	IV	—
13	0.5	BU / BK	115	I	—	Right Rear Speaker [-] Control	13	0.5	BU / BK	115	IV	—
14	0.5	WH	46	I	—	Right Rear Speaker [+] Control	14	0.5	WH	46	IV	—
15 - 16	—	—	—	—	—	Not Occupied	15 - 16	—	—	—	—	—
17	0.75	GY	295	I	—	Door Lock Actuator Lock Control	17	0.75	GY	295	IV	—
18 - 19	—	—	—	—	—	Not Occupied	18 - 19	—	—	—	—	—
20	2.5	BK	1250	II	—	Ground	20	2.5	BK	1250	III	—

X901 Rear Bumper Harness to Chassis Harness



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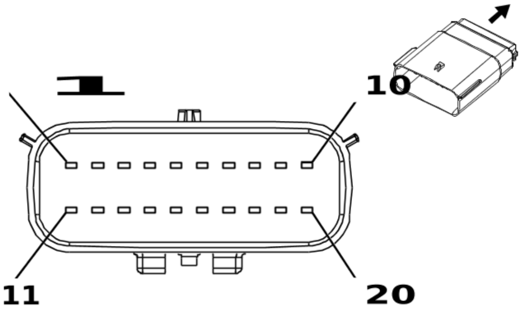


2871861

Connector Part Information

Harness Type: Rear Bumper
OEM Connector: 13650143
Service Connector: Service by Harness - See Part Catalog
Description: 20 <p01>-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33482-2310
Service Connector: 19351705
Description: 20 <p01>-Way M 1.5 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	19119842	J-35616-14 (GN)	J-38125-217
III	19119842	J-35616-3 (GY)	J-38125-217

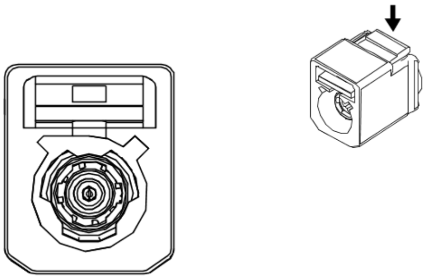
X901 Rear Bumper Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN / YE	6846	I	—	Rear License Plate Lamp Control	1	0.5	GN / YE	6846	II	—
2 - 3	—	—	—	—	—	Not Occupied	2 - 3	—	—	—	—	—
4	0.5	BK / WH	1751	I	—	Signal Ground	4	0.75	BK / WH	1751	III	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.5	BK	1450	I	—	Ground	6	1	BK	1450	III	—
7	0.35	GY / YE	1760	I	—	Left Side Object Detection LED Control	7	0.5	GY / YE	1760	II	—
8	0.35	GY	1761	I	—	Right Side Object Detection LED Control	8	0.5	GY	1761	II	—
9	0.5	BN / WH	2374	I	—	Object Sensor Voltage Reference	9	0.5	BN / WH	2374	II	—
10	0.5	YE	2375	I	—	Left Rear Outer Parking Assist Sensor Signal	10	0.5	YE	2375	II	—

X901 Rear Bumper Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	YE / BU	2376	I	—	Left Rear Middle Parking Assist Sensor Signal	11	0.5	YE / BU	2376	II	—
12	0.5	YE / WH	2377	I	—	Right Rear Middle Parking Assist Sensor Signal	12	0.5	YE / WH	2377	II	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.5	RD / GN	1840	I	—	Battery Positive Voltage	14	0.5	RD / GN	1840	II	—
15	0.5	YE / VT	2378	I	—	Right Rear Outer Parking Assist Sensor Signal	15	0.5	YE / VT	2378	II	—
16	0.5	BK / GY	2379	I	—	Object Sensor Low Reference	16	0.5	BK / GY	2379	II	—
17	—	—	—	—	—	Not Occupied	17	—	—	—	—	—
18	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	18	0.5	GN	5060	II	—
19 - 20	—	—	—	—	—	Not Occupied	19 - 20	—	—	—	—	—

X909 Liftgate Harness to Chassis Harness (UVB/UVI/UVN/UVS)



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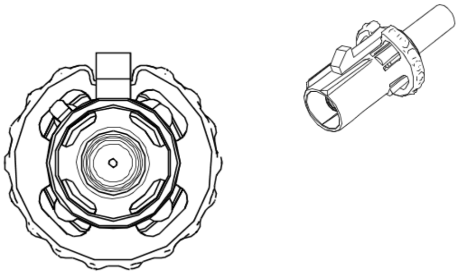


4109605

Connector Part Information

Harness Type: Liftgate COAX
OEM Connector: 13514203
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way F Coax Type

Connector Part Information

Harness Type: Chassis COAX
OEM Connector: 13514206
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1 <p01>-Way M Coax Type

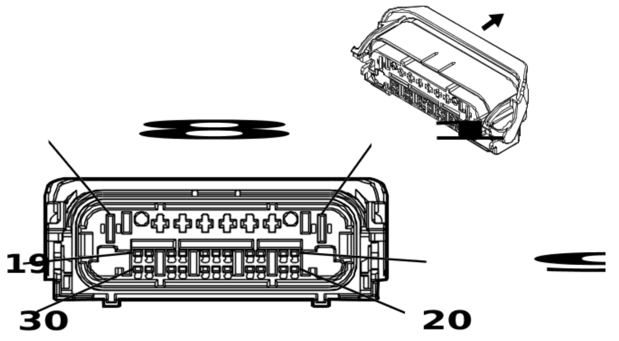
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X909 Liftgate Harness to Chassis Harness (UVB/UVI/UVN/UVS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X926 Endgate Harness to Chassis Harness (-5N5)



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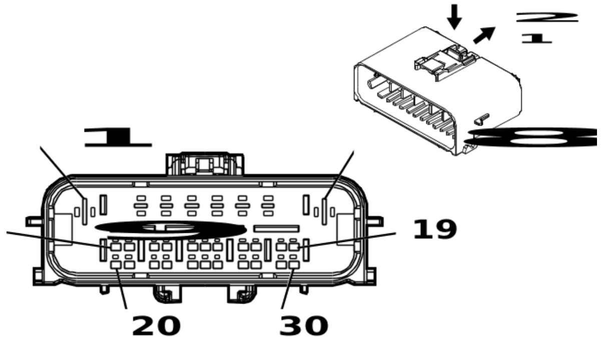


4817393

Connector Part Information

Harness Type: Endgate

OEM Connector: 33378383

Service Connector: Service by Harness - See Part Catalog

Description: 30 <p01>-Way F 1.2 MCON, 2.8, 6.3 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis

OEM Connector: 2301461-1

Service Connector: 19371177

Description: 30 <p01>-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	Not required	J-35616-40 (BU)	No Tool Required
III	13575376	J-35616-43 (RD)	J-38125-557
IV	19330704	J-35616-17 (LT GN)	J-38125-215A

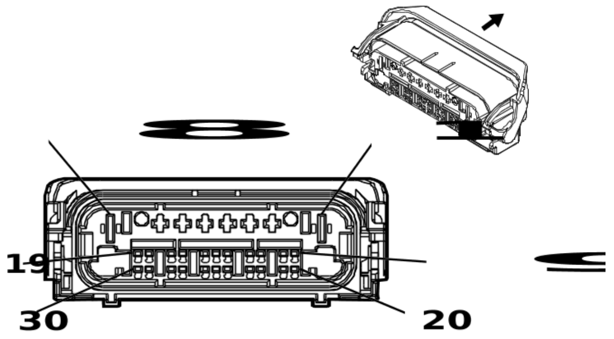
X926 Endgate Harness to Chassis Harness (-5N5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / GY	7040	II	—	Battery Positive Voltage	1	2.5	RD / GY	7040	III	—
2 - 7	—	—	—	—	—	Not Occupied	2 - 7	—	—	—	—	—
8	2.5	BK	1450	II	—	Ground	8	4	BK	1450	III	—
9	0.5	BK / WH	1751	I	—	Signal Ground	9	0.5	BK / WH	1751	IV	—
10	0.5	YE / BU	7295	I	—	Left Minor Endgate Ajar Signal	10	0.5	YE / BU	7295	IV	—
11	0.35	WH / BN	7296	I	—	Right Minor Endgate Ajar Signal	11	0.5	WH / BN	7296	IV	—
12	0.35	BU	6974	I	—	Rearview Camera Low Reference	12	0.5	BU	6974	IV	—
13	0.5	GY	1198	I	—	Endgate Release Switch Analog Signal Interior	13	0.5	GY	1198	IV	—
14	0.5	WH / BU	6973	I	—	Rearview Camera Signal [-]	14	0.5	WH / BU	6973	IV	—

X926 Endgate Harness to Chassis Harness (-5N5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.75	VT	7725	I	—	Minor Endgate Motor Control	16	0.75	VT	7725	IV	—
17	0.75	YE / BK	7730	I	—	Major Endgate Motor Low Reference	17	0.75	YE / BK	7730	IV	—
18	0.75	BN / BK	7726	I	—	Minor Endgate Motor Low Reference	18	0.75	BN / BK	7726	IV	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	20	0.5	GN	5060	IV	—
21	0.5	VT / GN	1739	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT / GN	1739	IV	—
22 - 24	—	—	—	—	—	Not Occupied	22 - 24	—	—	—	—	—
25	0.5	WH / VT	1430	I	—	Exterior Courtesy Lamp Control	25	0.5	WH / VT	1430	IV	—
26	0.5	GY / YE	6972	I	—	Rearview Camera Signal [+]	26	0.5	GY / YE	6972	IV	—
27	0.5	GY	7292	I	—	Major Endgate Release Switch Signal Exterior	27	0.5	GY	7292	IV	—
28	0.35	YE	7294	I	—	Minor Endgate Release Switch Discrete Signal Exterior	28	0.5	YE	7294	IV	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	0.75	GN	1299	I	—	Major Endgate Motor Control	30	0.75	GN	1299	IV	—

X926 Rearview Camera Harness to Chassis Harness (5N5)



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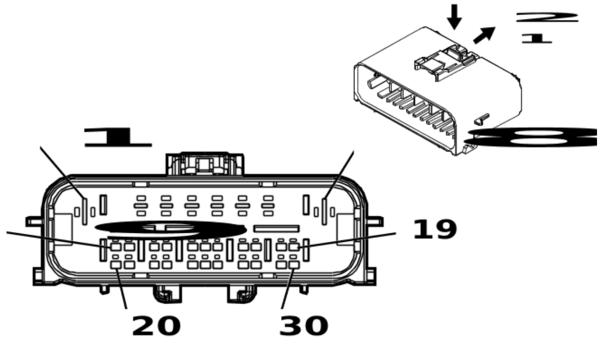


4817393

Connector Part Information

Harness Type: Rearview Camera

OEM Connector: 33378383

Service Connector: Service by Harness - See Part Catalog

Description: 30 <p01>-Way F 1.2 MCON, 2.8, 6.3 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis

OEM Connector: 2301461-1

Service Connector: 19371177

Description: 30 <p01>-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (LT GN)	No Tool Required
II	13575376	J-35616-43 (RD)	J-38125-557
III	19330704	J-35616-13 (BU)	J-38125-215A

X926 Rearview Camera Harness to Chassis Harness (5N5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Battery Positive Voltage	1	2.5	RD / GY	7040	II	—
2 - 7	—	—	—	—	—	Not Occupied	2 - 7	—	—	—	—	—
8	—	—	—	—	—	Ground	8	4	BK	1450	II	—
9	0.5	BK / WH	1751	I	—	Signal Ground	9	0.5	BK / WH	1751	III	—
10	—	—	—	—	—	Left Minor Endgate Ajar Signal	10	0.5	YE / BU	7295	III	—
11	—	—	—	—	—	Right Minor Endgate Ajar Signal	11	0.5	WH / BN	7296	III	—
12	0.35	BU	6974	I	—	Rearview Camera Low Reference	12	0.5	BU	6974	III	—
13	—	—	—	—	—	Endgate Release Switch Analog Signal Interior	13	0.5	GY	1198	III	—
14	0.5	WH / BU	6973	I	—	Rearview Camera Signal [-]	14	0.5	WH / BU	6973	III	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—

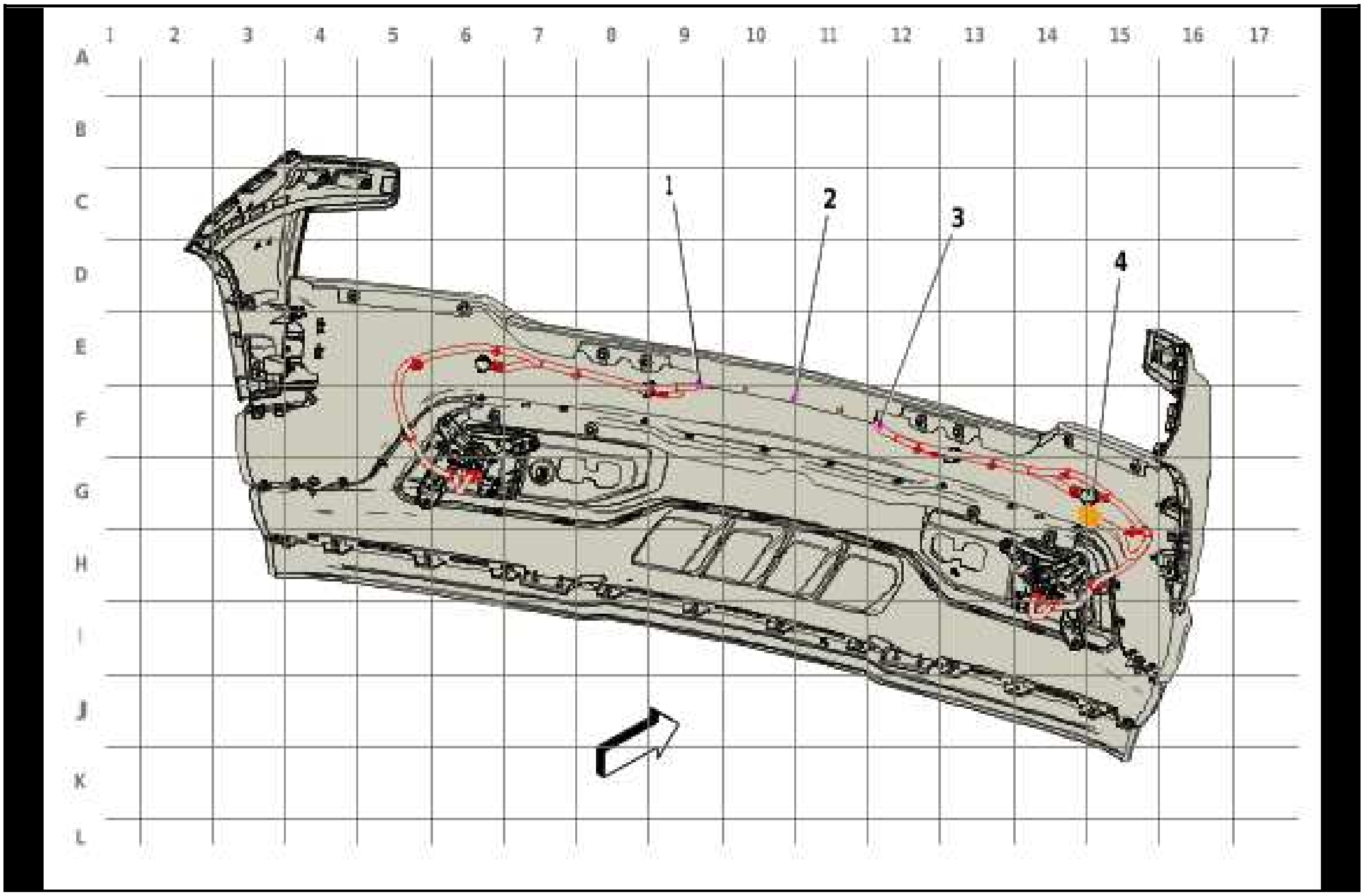
X926 Rearview Camera Harness to Chassis Harness (5N5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	—	—	—	—	—	Minor Endgate Motor Control	16	0.75	VT	7725	III	—
17	—	—	—	—	—	Major Endgate Motor Low Reference	17	0.75	YE / BK	7730	III	—
18	—	—	—	—	—	Minor Endgate Motor Low Reference	18	0.75	BN / BK	7726	III	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	—	—	—	—	—	Low Speed GMLAN Serial Data	20	0.5	GN	5060	III	—
21	—	—	—	—	—	Run/Crank Ignition 1 Voltage	21	0.5	VT / GN	1739	III	—
22 - 24	—	—	—	—	—	Not Occupied	22 - 24	—	—	—	—	—
25	—	—	—	—	—	Exterior Courtesy Lamp Control	25	0.5	WH / VT	1430	III	—
26	0.5	GY / YE	6972	I	—	Rearview Camera Signal [+]	26	0.5	GY / YE	6972	III	—
27	—	—	—	—	—	Major Endgate Release Switch Signal Exterior	27	0.5	GY	7292	III	—
28	—	—	—	—	—	Minor Endgate Release Switch Discrete Signal Exterior	28	0.5	YE	7294	III	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	—	—	—	—	—	Major Endgate Motor Control	30	0.75	GN	1299	III	—

Electrical Component Locator and Harness Routing Views

Schematic and Routing Diagrams

Harness Routing Views (Front of Vehicle - Front Bumper Harness)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5023359

Items

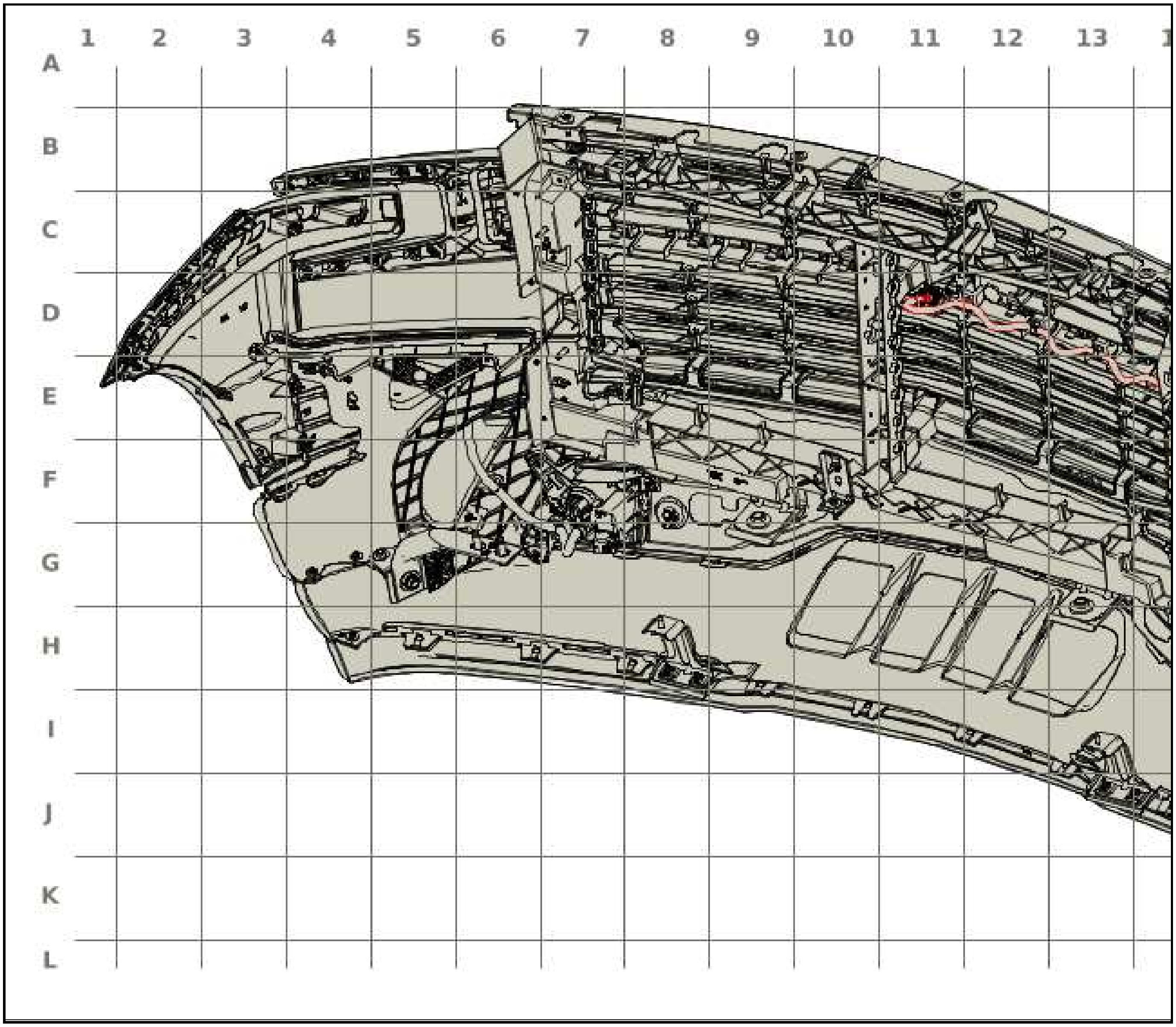
(1) J100 Front Bumper Harness (UD5)

(2) J101 Front Bumper Harness (UD5)

(3) J102 Front Bumper Harness (T3U)

(4) X100 Front Bumper Harness to Body Harness (T3U/UD5)

Harness Routing Views (Front of Vehicle - Grille Frontview Camera Harness (UVI/UV2))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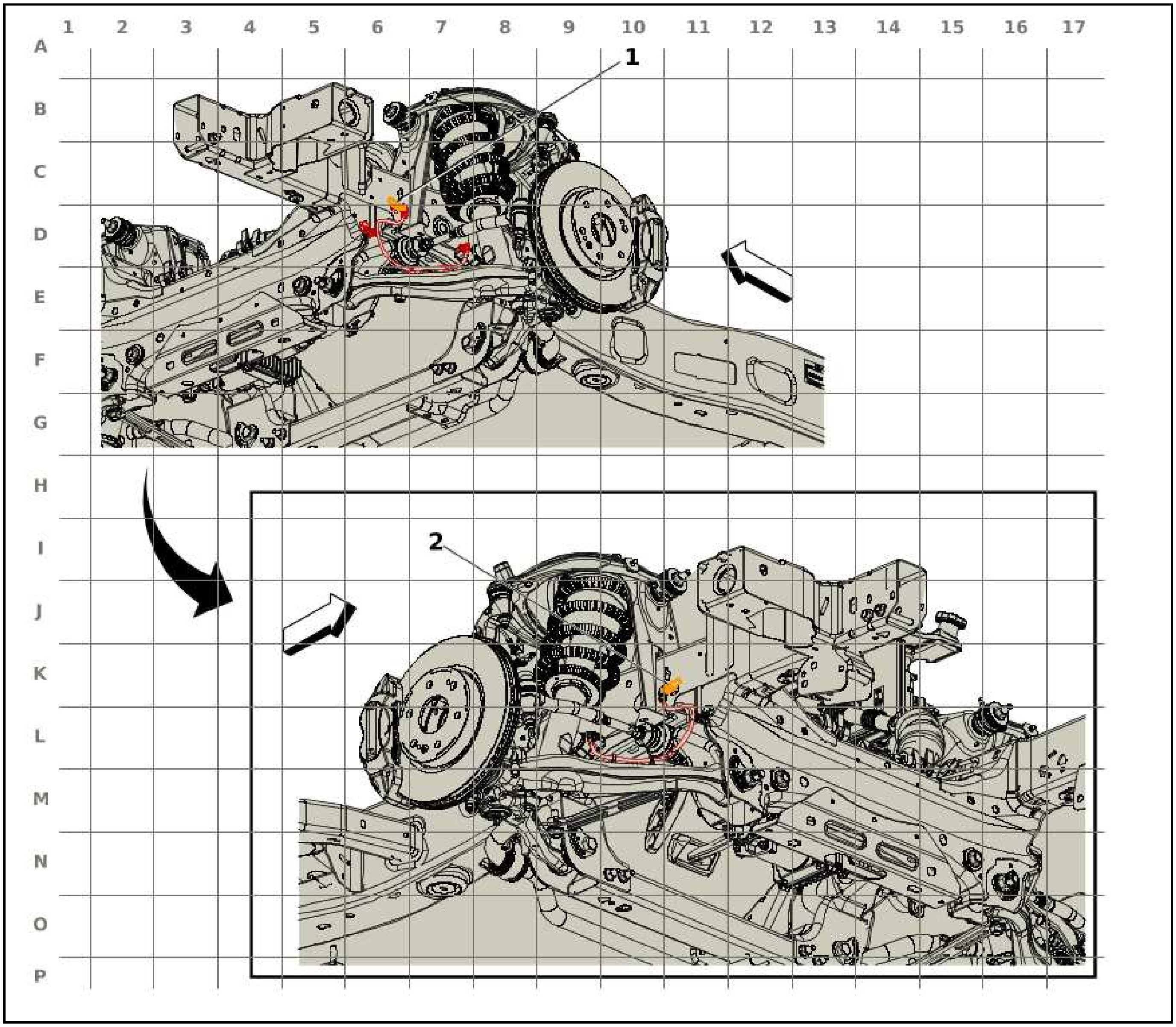
Items

(1)	X127 Grille Frontview Camera Harness to Body Harness (UVI/UVS)

Harness Routing Views (Vehicle Underbody - Electronic Suspension Strut Extension Harness)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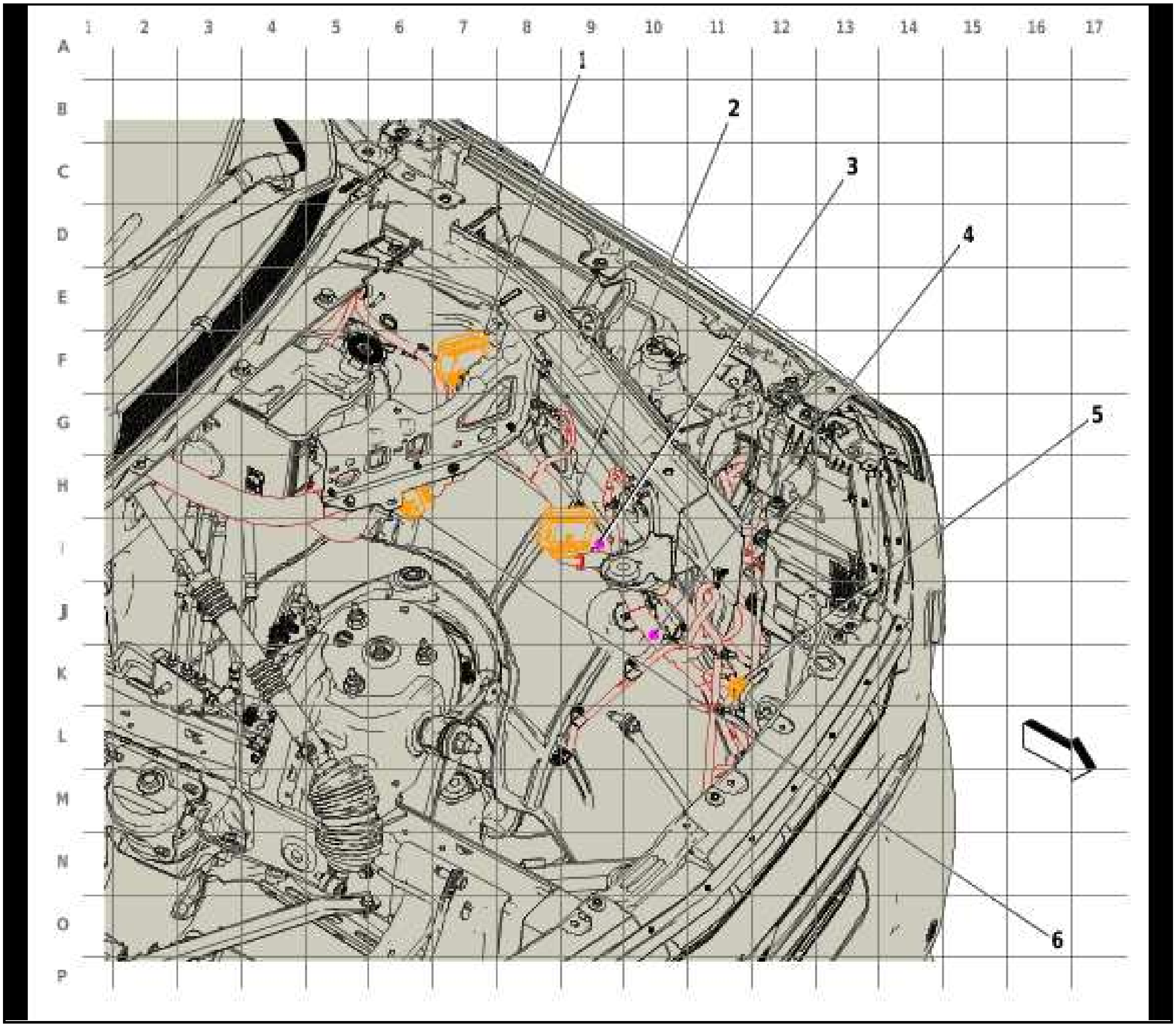
Items

(1) X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

(2) X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

Harness Routing Views (Engine Compartment - Body Harness - Left)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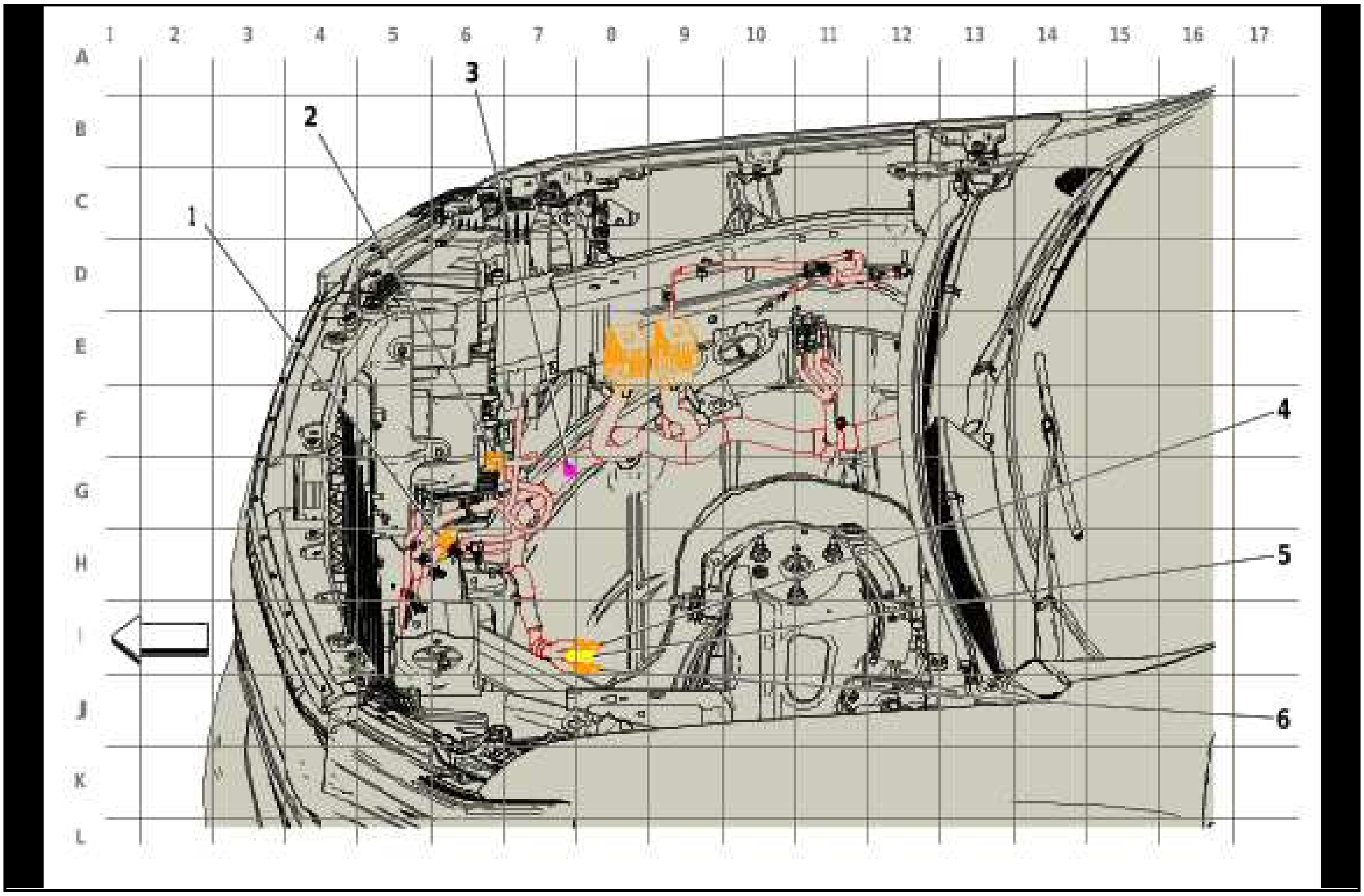
Harness Routing Views (Engine Compartment - Body Harness - Right)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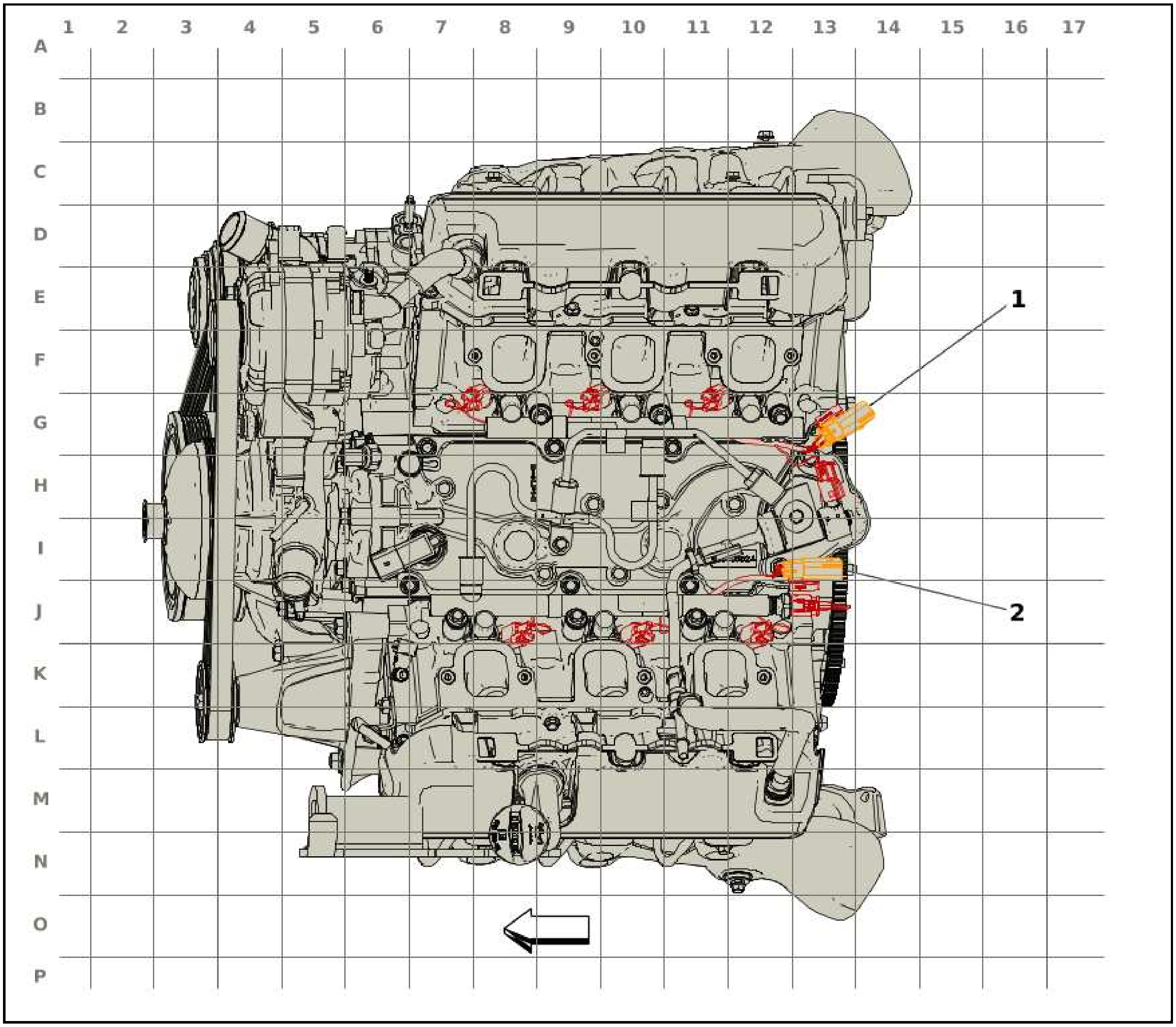
Harness Routing Views (Engine Compartment - Engine Harness - Top (LV3))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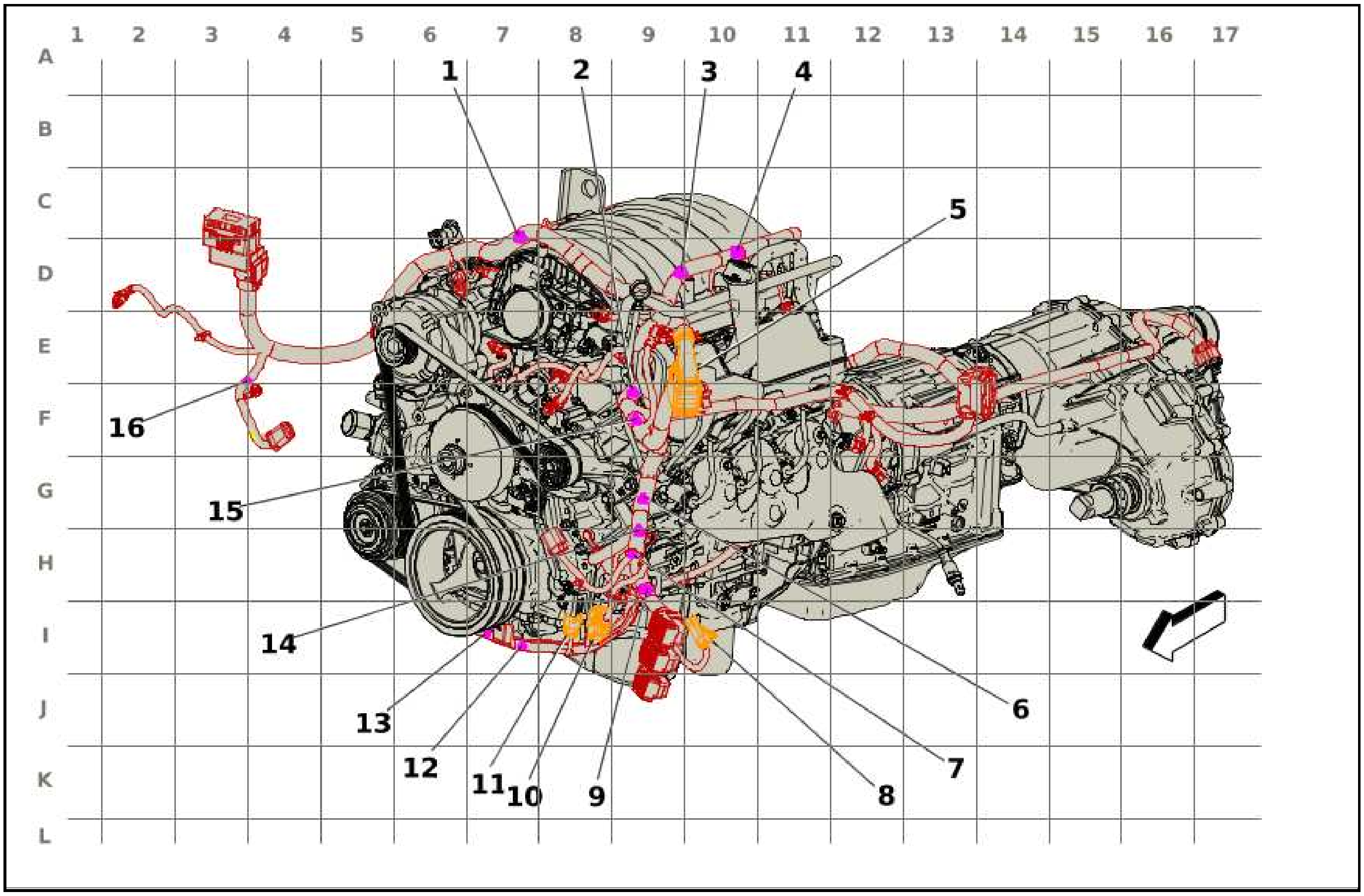
5002837

Items

(1) X161 Engine Harness to Fuel Injector Harness (L82/L84/L87/LV3)

(2) X160 Engine Harness to Fuel Injector Harness

Harness Routing Views (Engine Compartment - Engine Harness - Left (LV3))



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Items

(1) J156 Engine Harness

(2) J153 Engine Harness

(3) J157 Engine Harness

(4) J158 Engine Harness (L82/L84/L87/LV3)

(5) X115 Engine Harness to Body Harness

(6) J152 Engine Harness

(7) J166 Engine Harness

(8) X111 Front Axle Harness to Engine Harness (NP0/NQH)

(9) J150 Engine Harness

(10) X171 Engine Harness to Chassis Harness

(11) X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/L84/L87/LV3)

(12) J179 Engine Harness (LV3/L82/L84/L87)

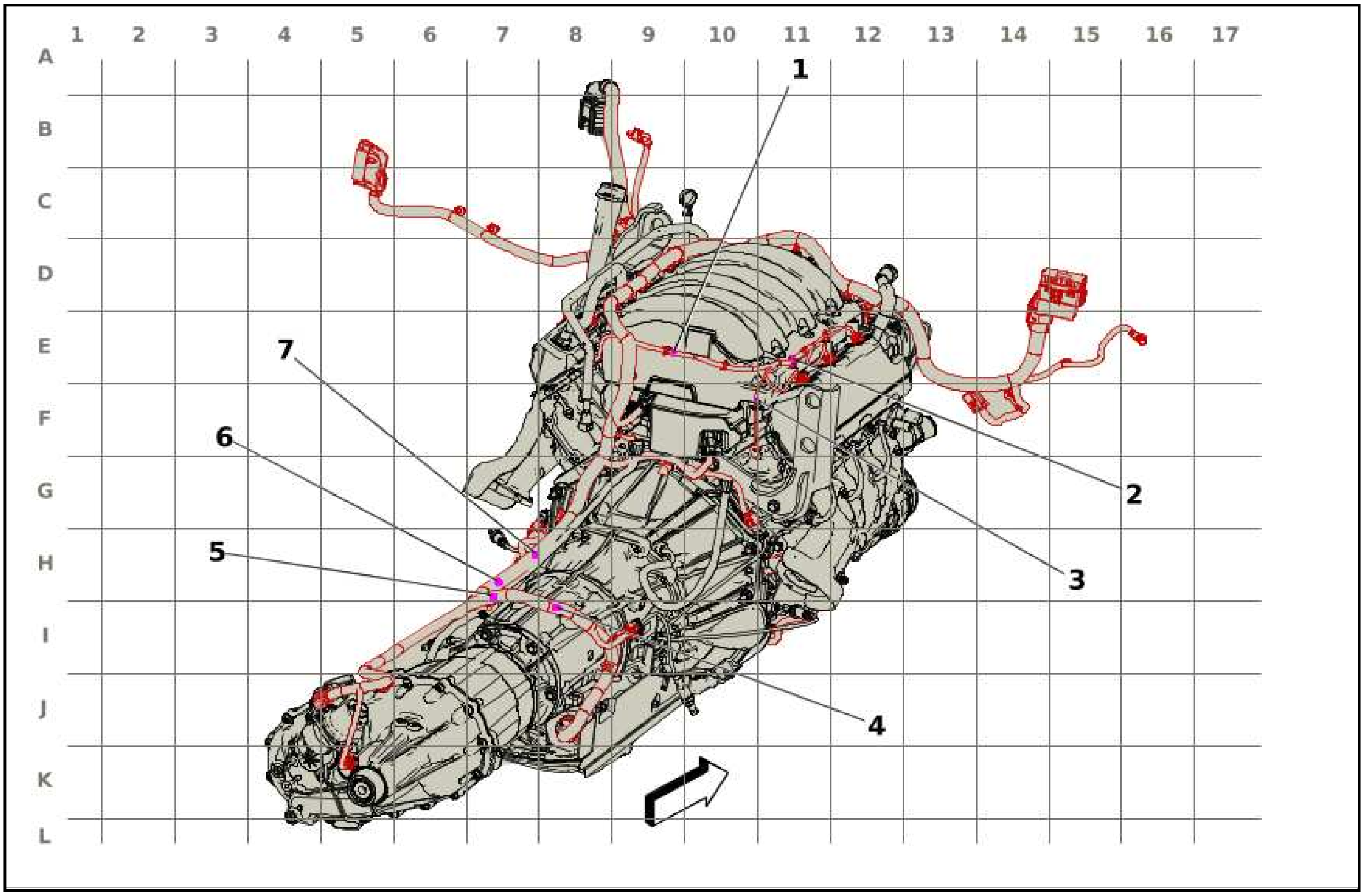
(13) J155 Engine Harness

(14) J151 Engine Harness

(15) J154 Engine Harness

(16) J173

Harness Routing Views (Engine Compartment - Engine Harness - Rear (LV3))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5002839

Items

(1) J159 Engine Harness (L82/L84/L87/LV3)

(2) J160 Engine Harness (L82/L84/L87/LV3)

(3) J161 Engine Harness (L3B/L82/L84/L87/LV3)

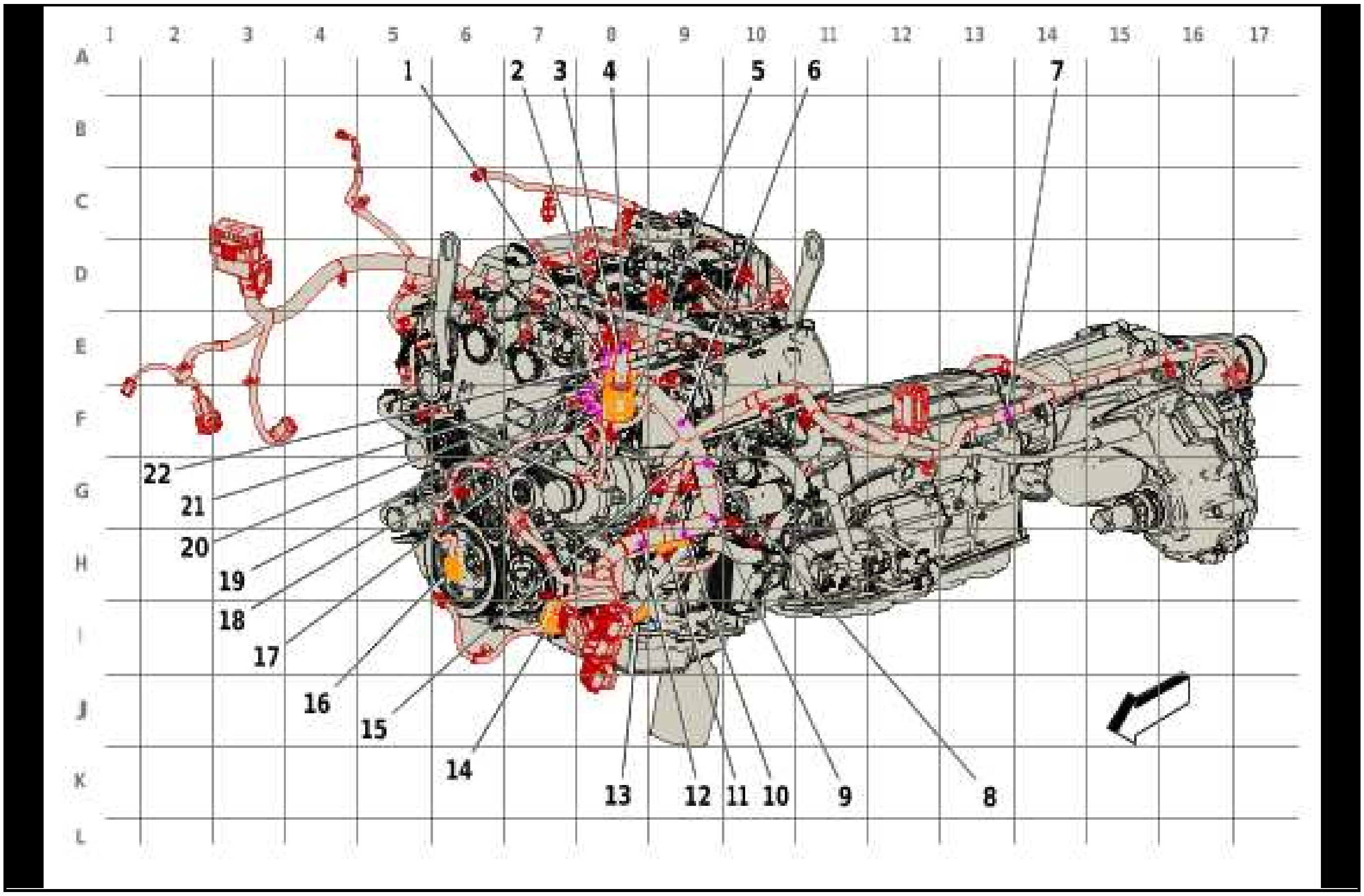
(4) J165 Engine Harness

(5) J164 Engine Harness (MYC)

(6) J163 Engine Harness

(7) J162 Engine Harness (L3B/L82/L84/L87/LV3)

Harness Routing Views (Engine Compartment - Engine Harness - Left Front (L3B))



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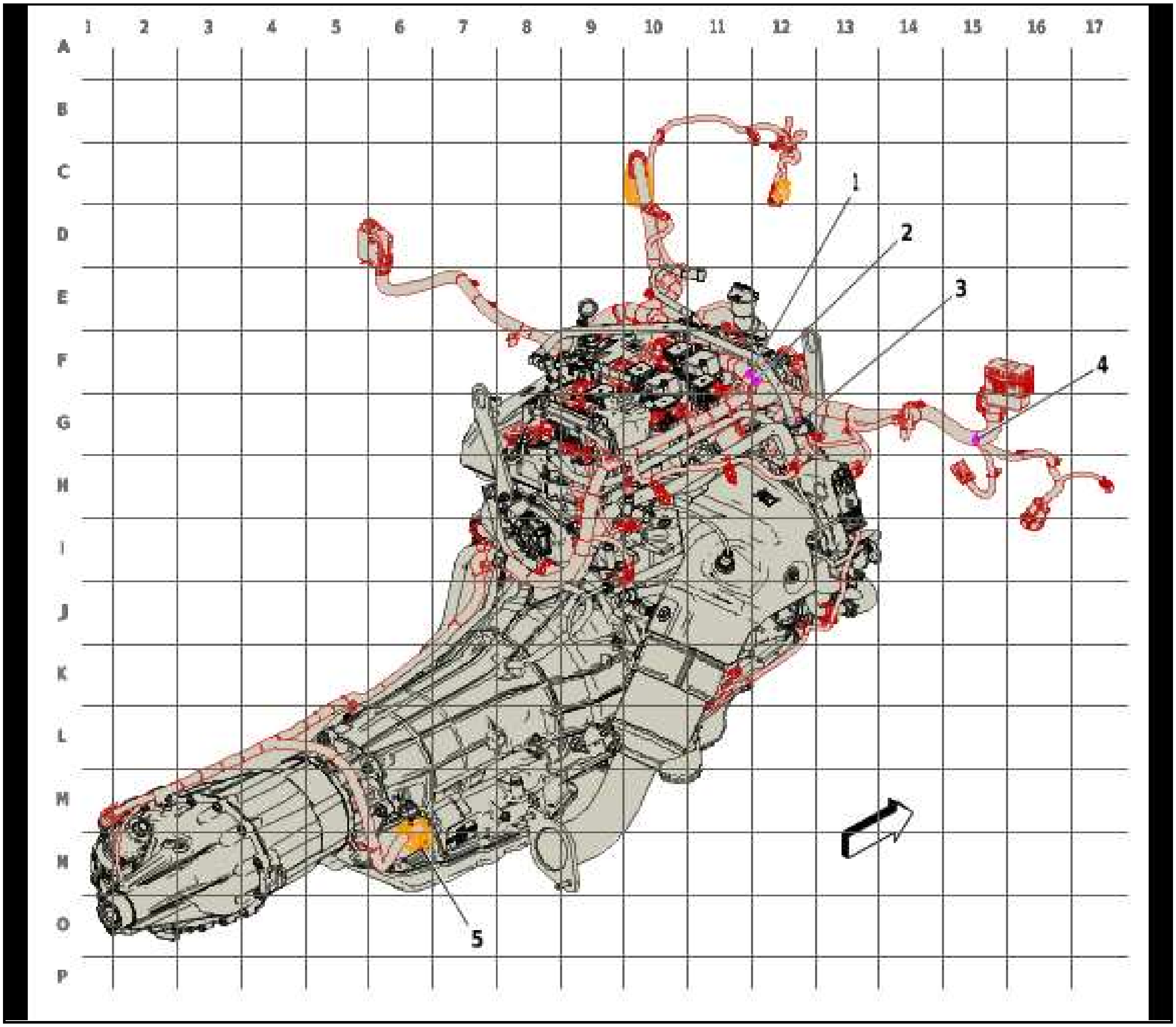
Items	
(1)	J178 Engine Harness (L3B/LV3/L82/L84/L87)
(2)	J156 Engine Harness
(3)	J158 Engine Harness (L82/L84/L87/LV3)
(4)	J152 Engine Harness
(5)	X115 Engine Harness to Body Harness
(6)	J148 Engine Harness (LM2)
(7)	J167 Engine Harness (MQE)
(8)	J163 Engine Harness
(9)	J173
(10)	J153 Engine Harness
(11)	X111 Front Axle Harness to Engine Harness (NP0/NQH)
(12)	J175 Engine Harness (L3B/LM2)
(13)	X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness
(14)	X171 Engine Harness to Chassis Harness
(15)	X160 Engine Harness to Fuel Injector Harness
(16)	X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)
(17)	J170 Engine Harness (VTI/WMI)
(18)	J174 Engine Harness (MQB/MQE)
(19)	J154 Engine Harness
(20)	J182 Engine Harness (L3B/LM2)
(21)	J151 Engine Harness
(22)	J150 Engine Harness

Harness Routing Views (Engine Compartment - Engine Harness - Right Rear (L3B))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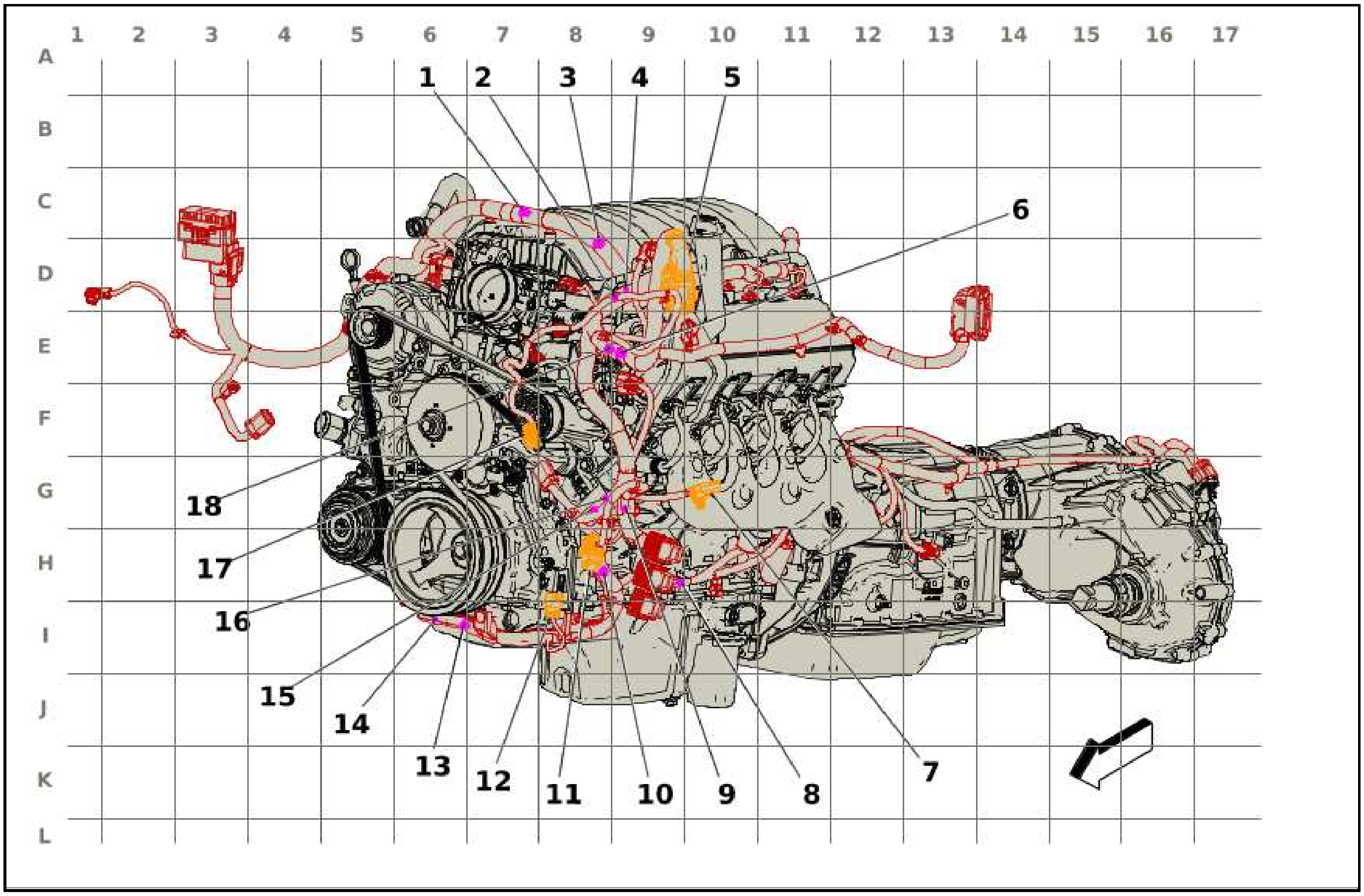
5124969

Items

- (1) J155 Engine Harness
- (2) J189 Engine Harness (L3B)
- (3) J165 Engine Harness
- (4) J169 Engine Harness (L3B)
- (5) X175 Engine Harness to Transmission Harness (MQE)

Harness Routing Views (Engine Compartment - Engine Harness - Left Front (L82))



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Items

(1) J161 Engine Harness (L3B/L82/L84/L87/LV3)

(2) J155 Engine Harness

(3) J173

(4) J165 Engine Harness

(5) X115 Engine Harness to Body Harness

(6) J164 Engine Harness (MYC)

(7) X111 Front Axle Harness to Engine Harness (NP0/NQH)

(8) J166 Engine Harness

(9) J153 Engine Harness

(10) J156 Engine Harness

(11) X171 Engine Harness to Chassis Harness

(12) X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/L84/L87/LV3)

(13) J178 Engine Harness (L3B/LV3/L82/L84/L87)

(14) J157 Engine Harness

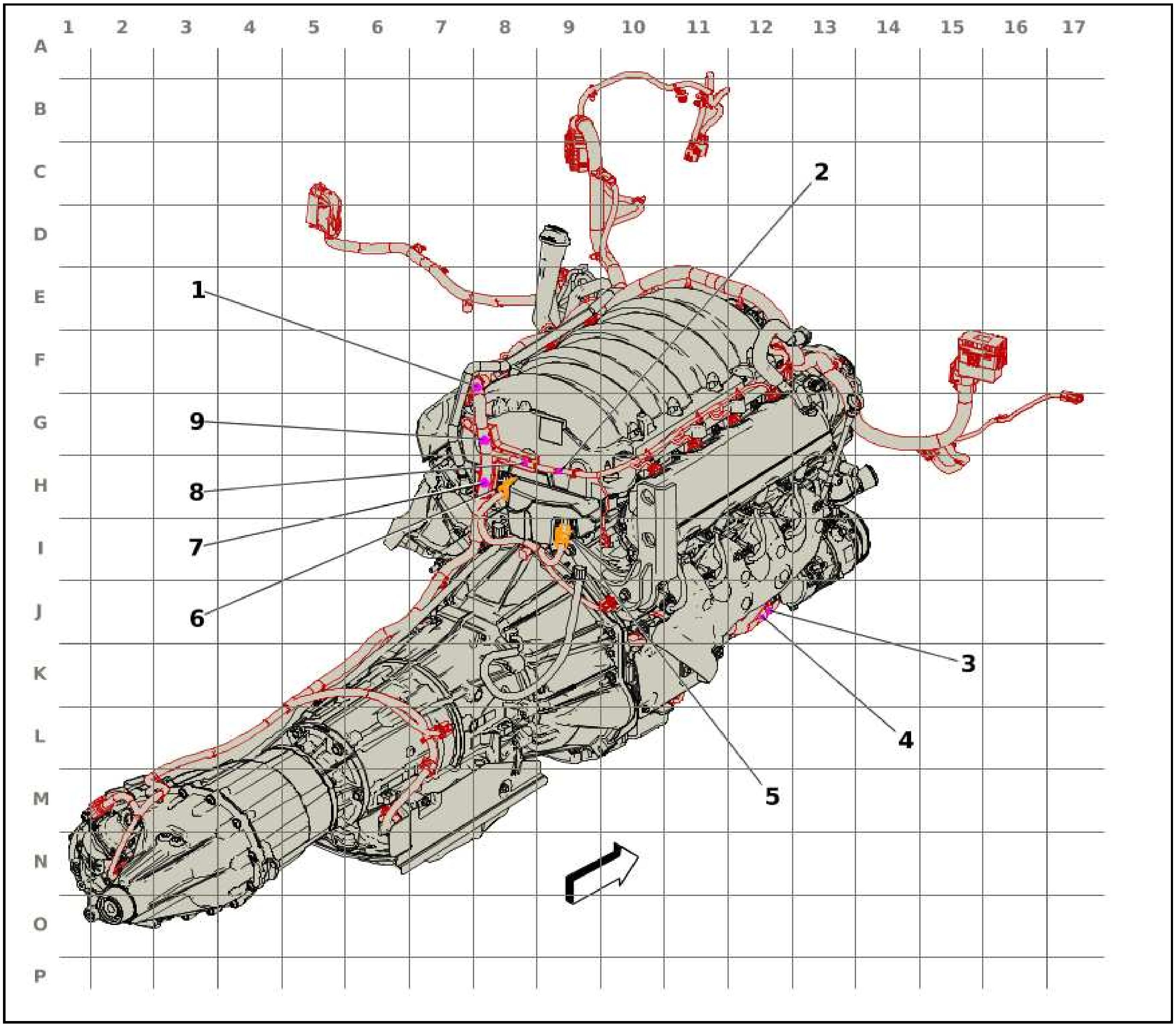
(15) J151 Engine Harness

(16) J154 Engine Harness

(17) X156 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L82/L84/L87)

(18) J150 Engine Harness

Harness Routing Views (Engine Compartment - Engine Harness - Right Rear (L82))



5124971

Items

(1) J158 Engine Harness (L82/L84/L87/LV3)

(2) J160 Engine Harness (L82/L84/L87/LV3)

(3) J163 Engine Harness

(4) J162 Engine Harness (L3B/L82/L84/L87/LV3)

(5) X161 Engine Harness to Fuel Injector Harness (L82/L84/L87/LV3)

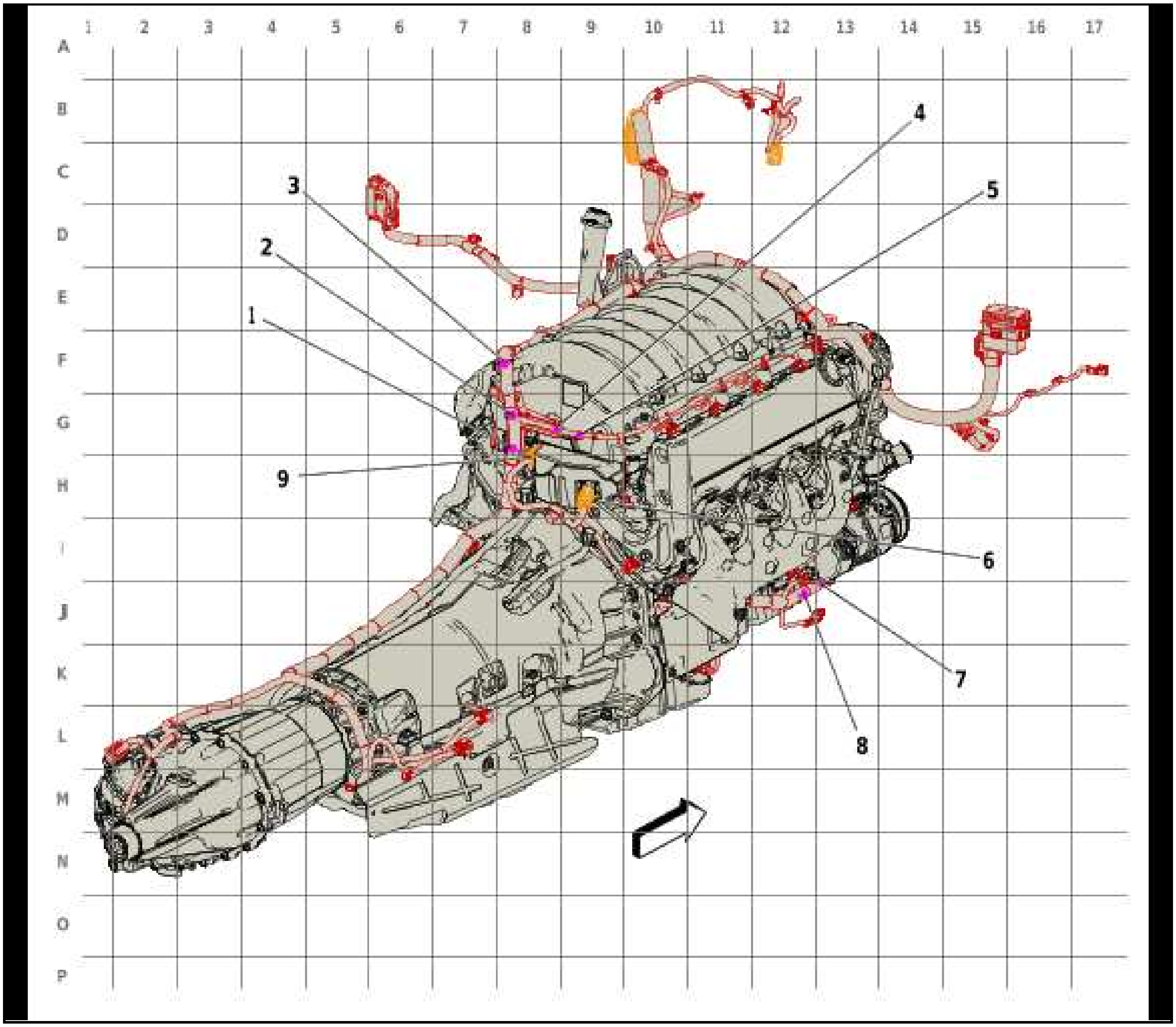
(6) X160 Engine Harness to Fuel Injector Harness

(7) J159 Engine Harness (L82/L84/L87/LV3)

(8) J152 Engine Harness

(9) J179 Engine Harness (LV3/L82/L84/L87)

Harness Routing Views (Engine Compartment - Engine Harness - Right Rear (L84/L87))

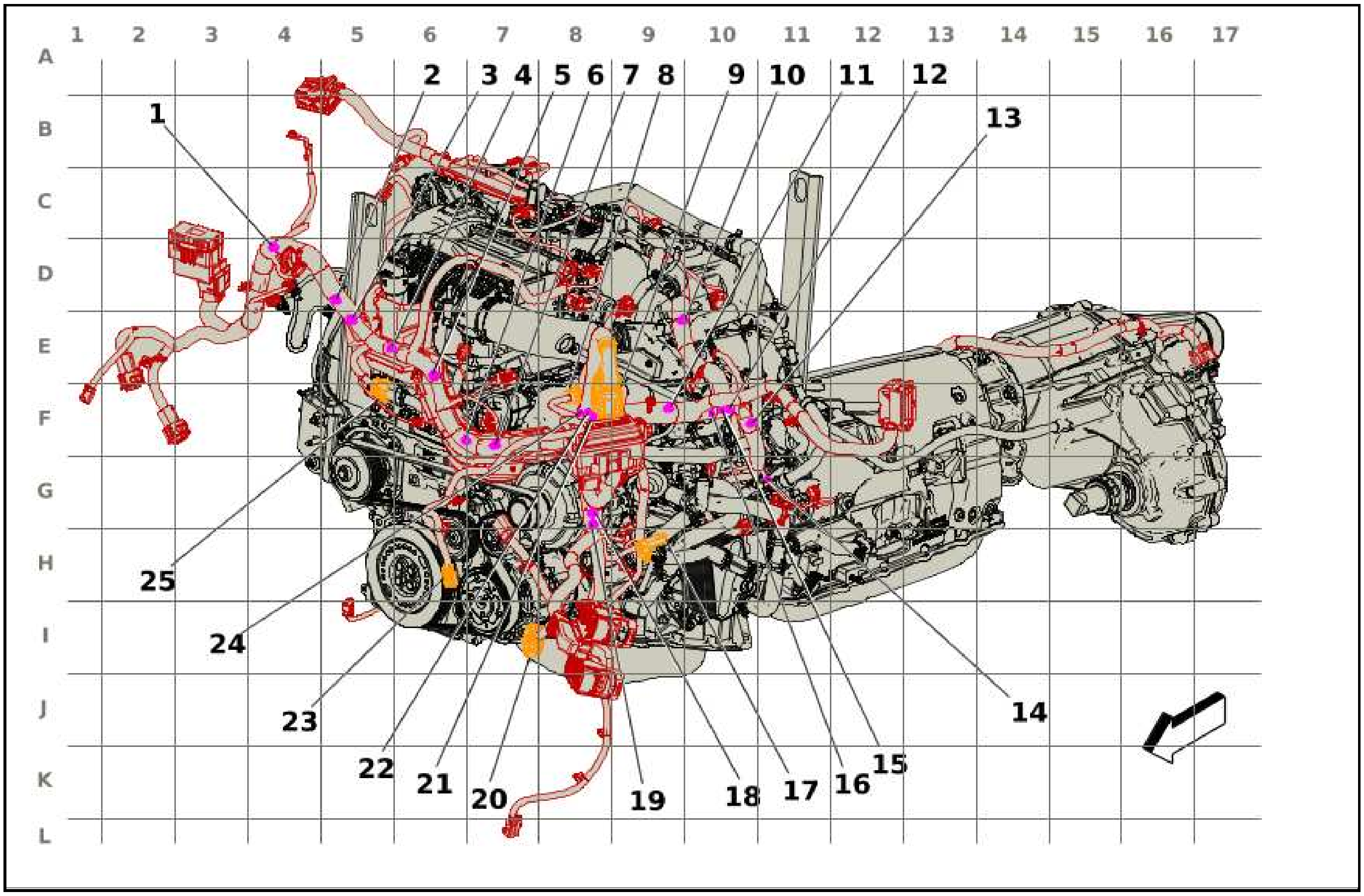


5124972

Items

(1)	J159 Engine Harness (L82/L84/L87/LV3)
(2)	J179 Engine Harness (LV3/L82/L84/L87)
(3)	J158 Engine Harness (L82/L84/L87/LV3)
(4)	J152 Engine Harness
(5)	J160 Engine Harness (L82/L84/L87/LV3)
(6)	X161 Engine Harness to Fuel Injector Harness (L82/L84/L87/LV3)
(7)	J163 Engine Harness
(8)	J162 Engine Harness (L3B/L82/L84/L87/LV3)
(9)	X160 Engine Harness to Fuel Injector Harness

Harness Routing Views (Engine Compartment - Engine Harness - Left Front (LM2))

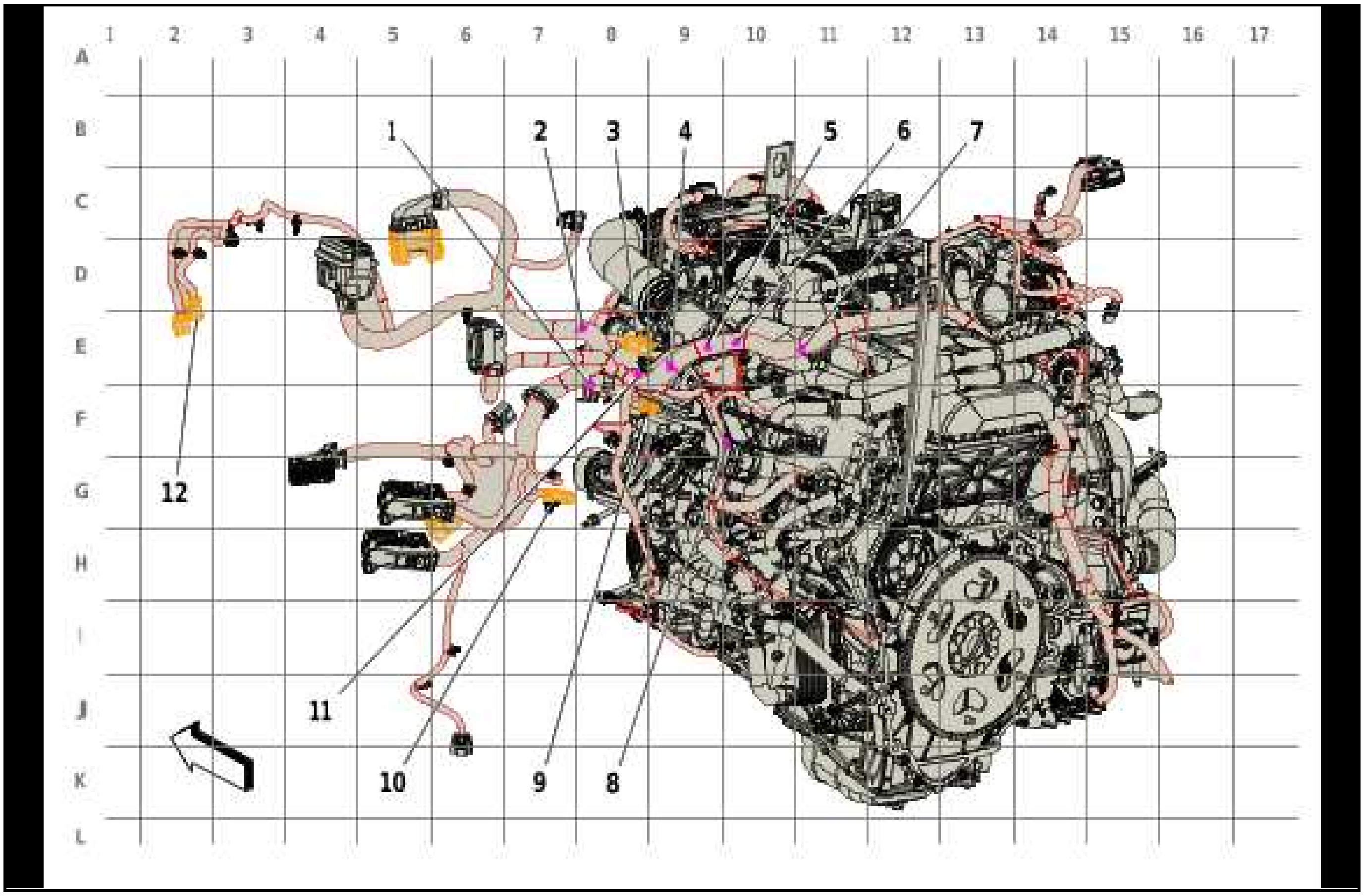


5124973

Items

(1)	J174 Engine Harness (MQB/MQE)
(2)	J173
(3)	J165 Engine Harness
(4)	J190 Engine Harness (LM2)
(5)	J153 Engine Harness
(6)	J155 Engine Harness
(7)	J175 Engine Harness (L3B/LM2)
(8)	X172 Engine Harness to Glow Plug Jumper Harness (LM2)
(9)	X115 Engine Harness to Body Harness
(10)	J156 Engine Harness
(11)	J150 Engine Harness
(12)	J166 Engine Harness
(13)	J157 Engine Harness
(14)	J154 Engine Harness
(15)	J182 Engine Harness (L3B/LM2)
(16)	J151 Engine Harness
(17)	X111 Front Axle Harness to Engine Harness (NP0/NQH)
(18)	J171 Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)
(19)	J170 Engine Harness (VTI/WMI)
(20)	X171 Engine Harness to Chassis Harness
(21)	J177 Engine Harness (LM2)
(22)	J176 Engine Harness (LM2)
(23)	X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)
(24)	J163 Engine Harness
(25)	X160 Engine Harness to Fuel Injector Harness

Harness Routing Views (Engine Compartment - Engine Harness - Left Rear (LM2))

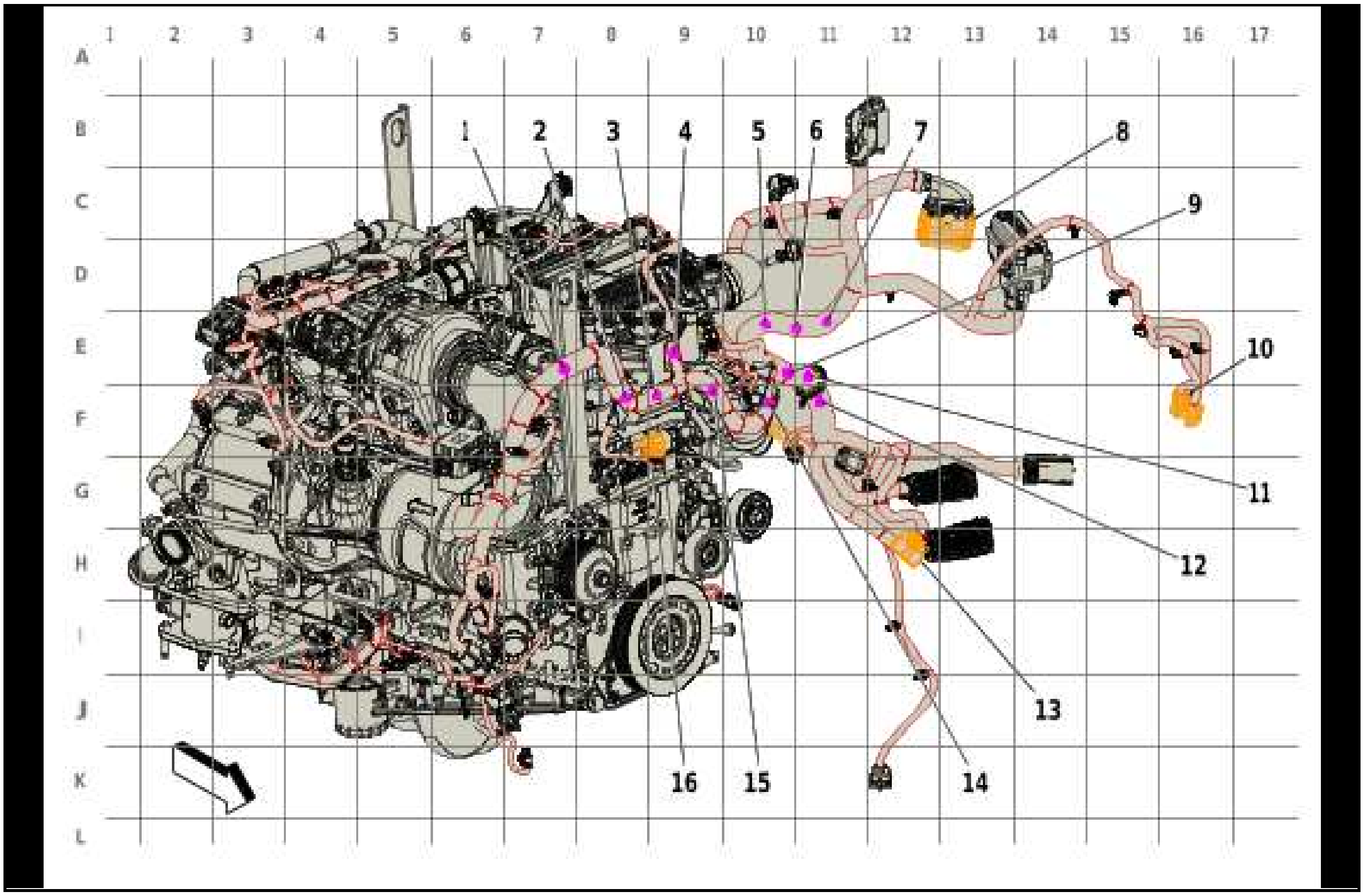


5672025

Items

(1)	J156 Engine Harness
(2)	J163 Engine Harness
(3)	X172 Engine Harness to Glow Plug Jumper Harness (LM2)
(4)	J150 Engine Harness
(5)	J151 Engine Harness
(6)	J152 Engine Harness
(7)	J155 Engine Harness
(8)	J157 Engine Harness
(9)	X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)
(10)	X111 Front Axle Harness to Engine Harness (NP0/NQH)
(11)	J166 Engine Harness
(12)	X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)

Harness Routing Views (Engine Compartment - Engine Harness - Right Front (LM2))



5672027

Items

(1) J174 Engine Harness (MQB/MQE)

(2) J173

(3) J190 Engine Harness (LM2)

(4) J191 Engine Harness (LM2)

(5) J163 Engine Harness

(6) J176 Engine Harness (LM2)

(7) J177 Engine Harness (LM2)

(8) X115 Engine Harness to Body Harness

(9) J170 Engine Harness (VTI/WMI)

(10) X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)

(11) J153 Engine Harness

(12) J175 Engine Harness (L3B/LM2)

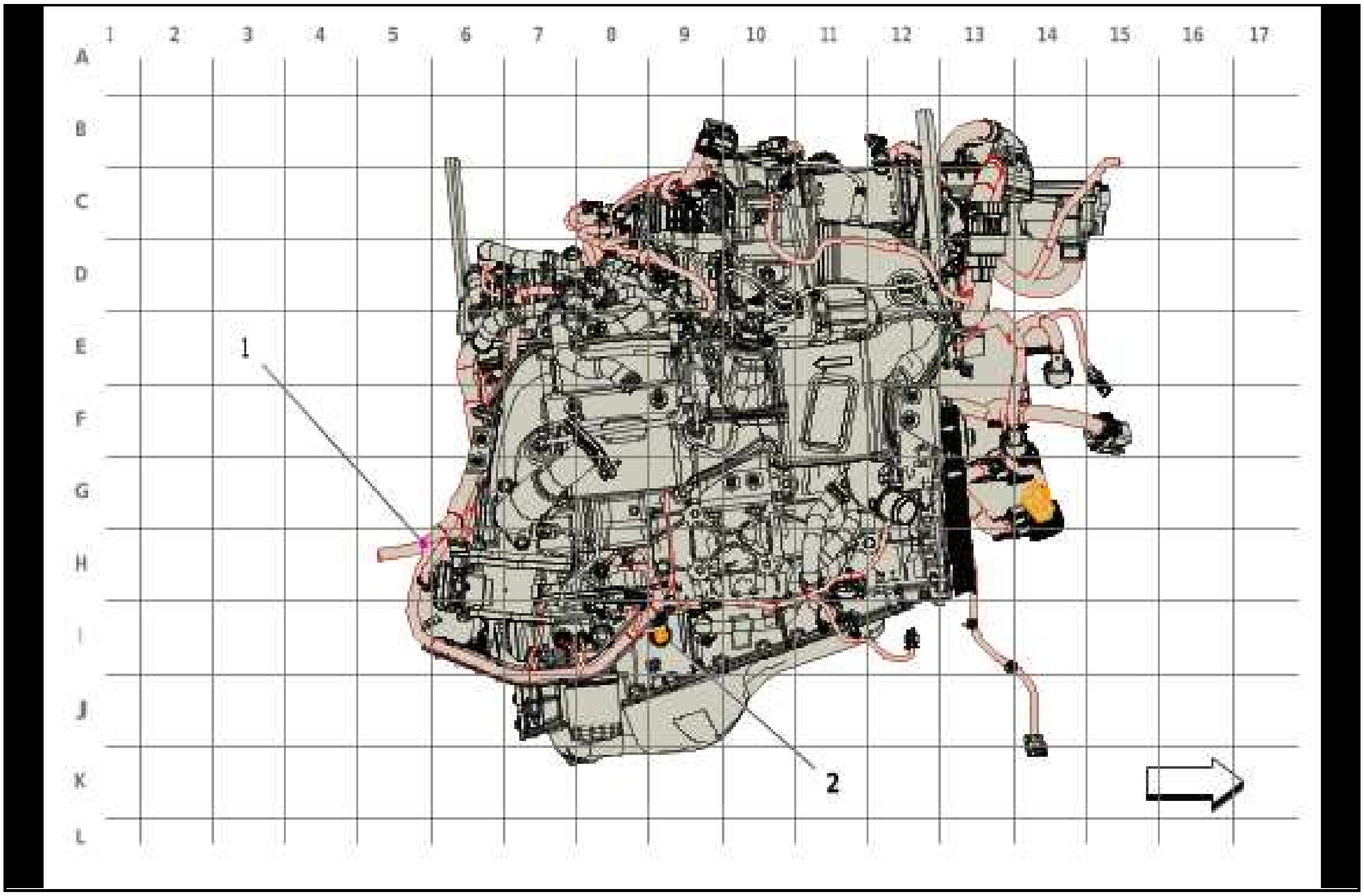
(13) X171 Engine Harness to Chassis Harness

(14) J154 Engine Harness

(15) J148 Engine Harness (LM2)

(16) X160 Engine Harness to Fuel Injector Harness

Harness Routing Views (Engine Compartment - Engine Harness - Right Rear (LM2))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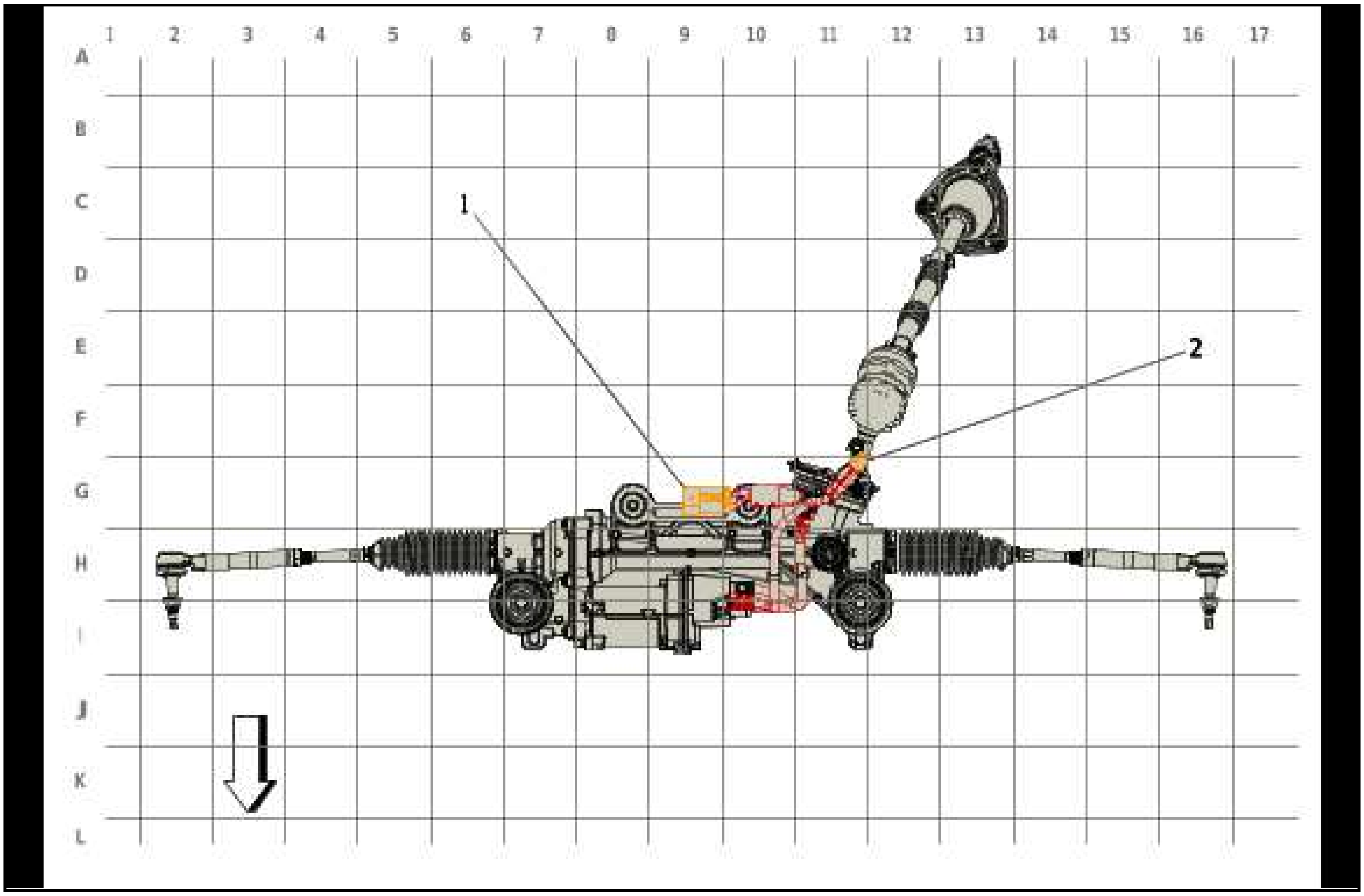
5672026

Items	
(1)	J165 Engine Harness

Harness Routing Views (Engine Compartment - Power Steering Jumper Harnesses)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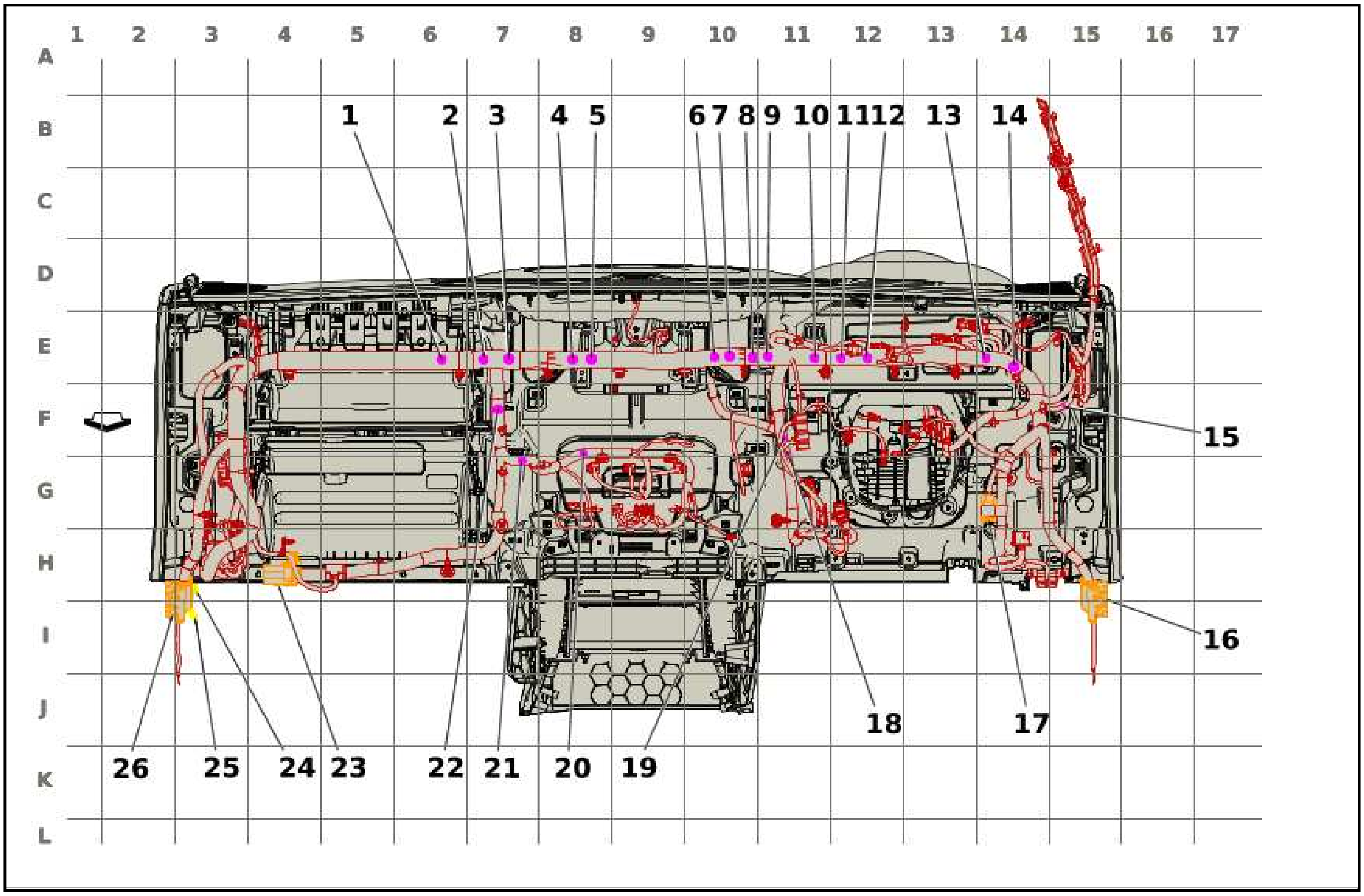
5592856

Items

(1)	X183 Power Steering Harness to Power Steering Jumper Harness
(2)	X182 Chassis Harness to Power Steering Jumper Harness

Harness Routing Views (Instrument Panel Harness)

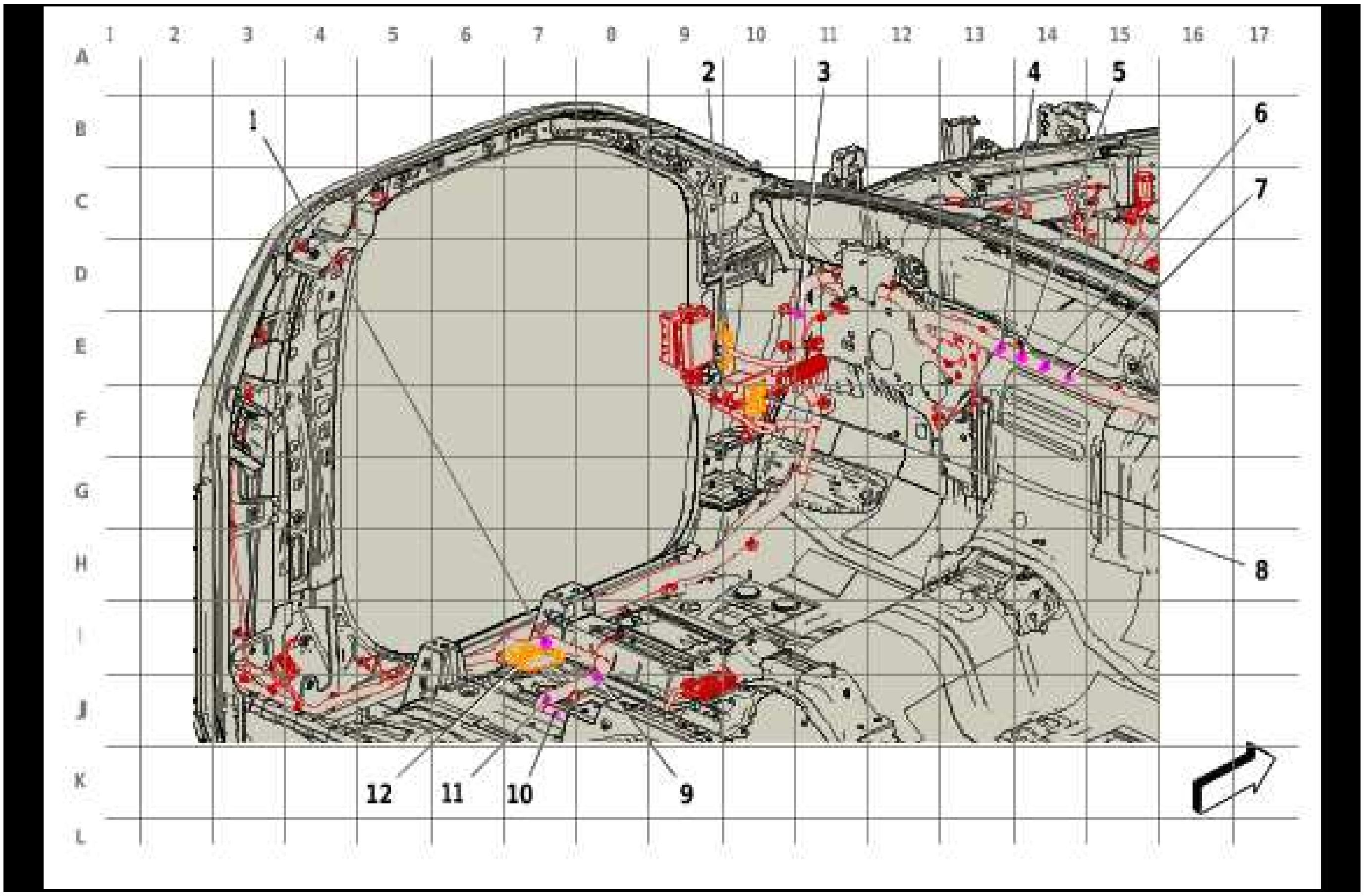


5034728

Items

(1)	J242 Instrument Panel Harness
(2)	J240 Instrument Panel Harness (JL1)
(3)	J239 Instrument Panel Harness
(4)	J238 Instrument Panel Harness (UEU/UE1/UDD)
(5)	J237 Instrument Panel Harness
(6)	J236 Instrument Panel Harness
(7)	J235 Instrument Panel Harness
(8)	J234 Instrument Panel Harness
(9)	J233 Instrument Panel Harness
(10)	J230 Instrument Panel Harness
(11)	J229 Instrument Panel Harness (UV6)
(12)	J228 Instrument Panel Harness
(13)	J227 Instrument Panel Harness
(14)	J226 Instrument Panel Harness (-BTM)
(15)	J225 Instrument Panel Harness
(16)	X225 Instrument Panel Harness to Body Harness
(17)	X260 Upfitter Harness to Instrument Panel Harness (Z82-JL1)
(18)	J232 Instrument Panel Harness
(19)	J231 Instrument Panel Harness (UE1)
(20)	J244 Instrument Panel Harness (KL9)
(21)	J243 Instrument Panel Harness (KL9)
(22)	J241 Instrument Panel Harness
(23)	X256 Headliner Harness to Instrument Panel Harness
(24)	X209 Body Harness to Instrument Panel Harness (UVB)
(25)	X211 Instrument Panel Harness to Body Harness
(26)	X275 Instrument Panel Harness to Body Harness

Harness Routing Views (Passenger Compartment - Body Harness - Left Front (Regular Cab))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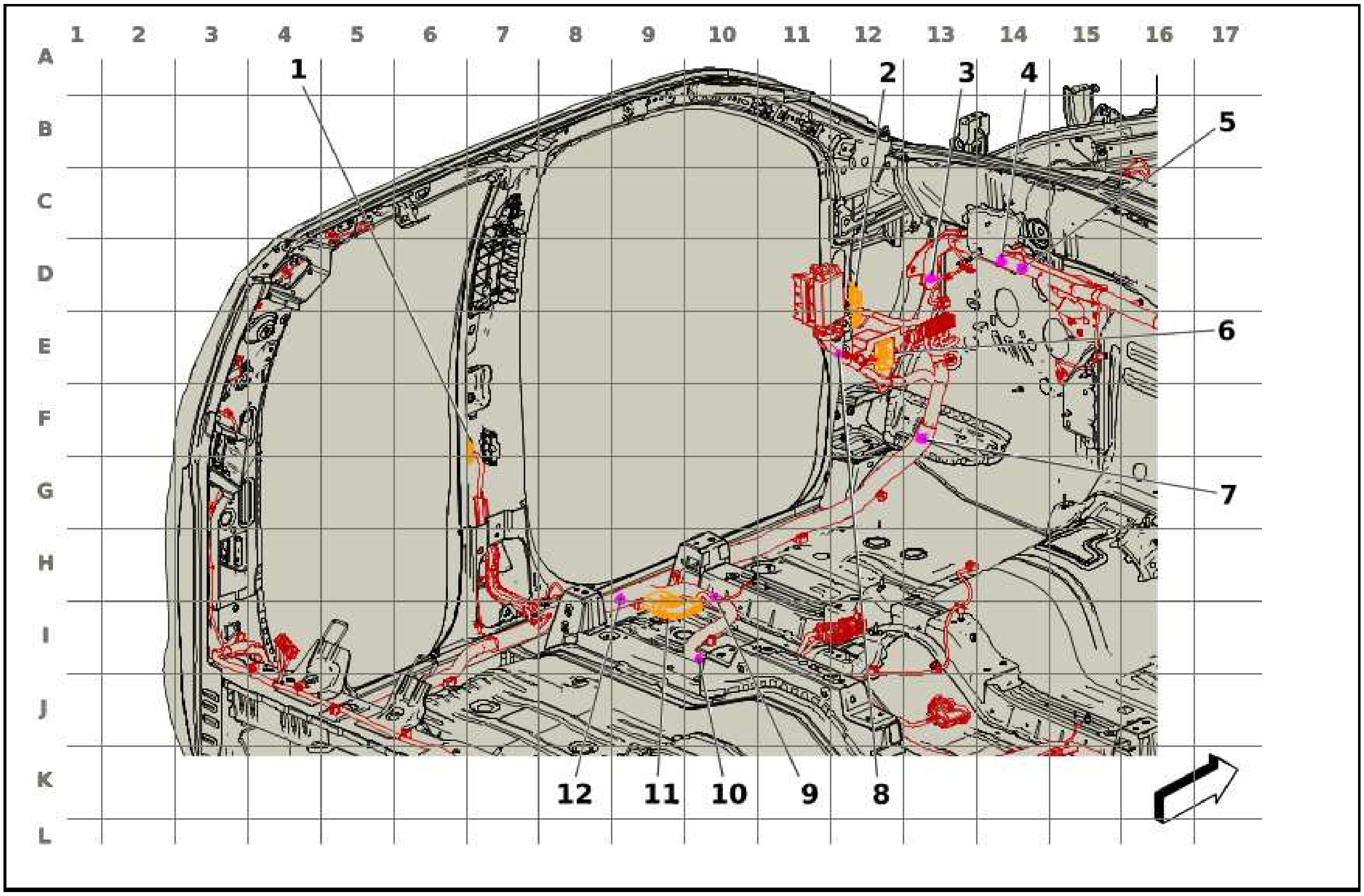
5023360

Items

(1)	J321 Body Harness ((BTM+(BOP/UD5/ UD7)/((UD5/UD7)+BOP))
(2)	X500 Driver Door Harness to Body Harness
(3)	J281 Body Harness
(4)	J200 Body Harness
(5)	J201 Body Harness
(6)	J202 Body Harness
(7)	J203 Body Harness
(8)	X225 Instrument Panel Harness to Body Harness
(9)	J323 Body Harness
(10)	J327 Body Harness
(11)	J325 Body Harness
(12)	X310 Driver Seat Harness to Body Harness

Harness Routing Views (Passenger Compartment - Body Harness - Left Front (Extended Cab))

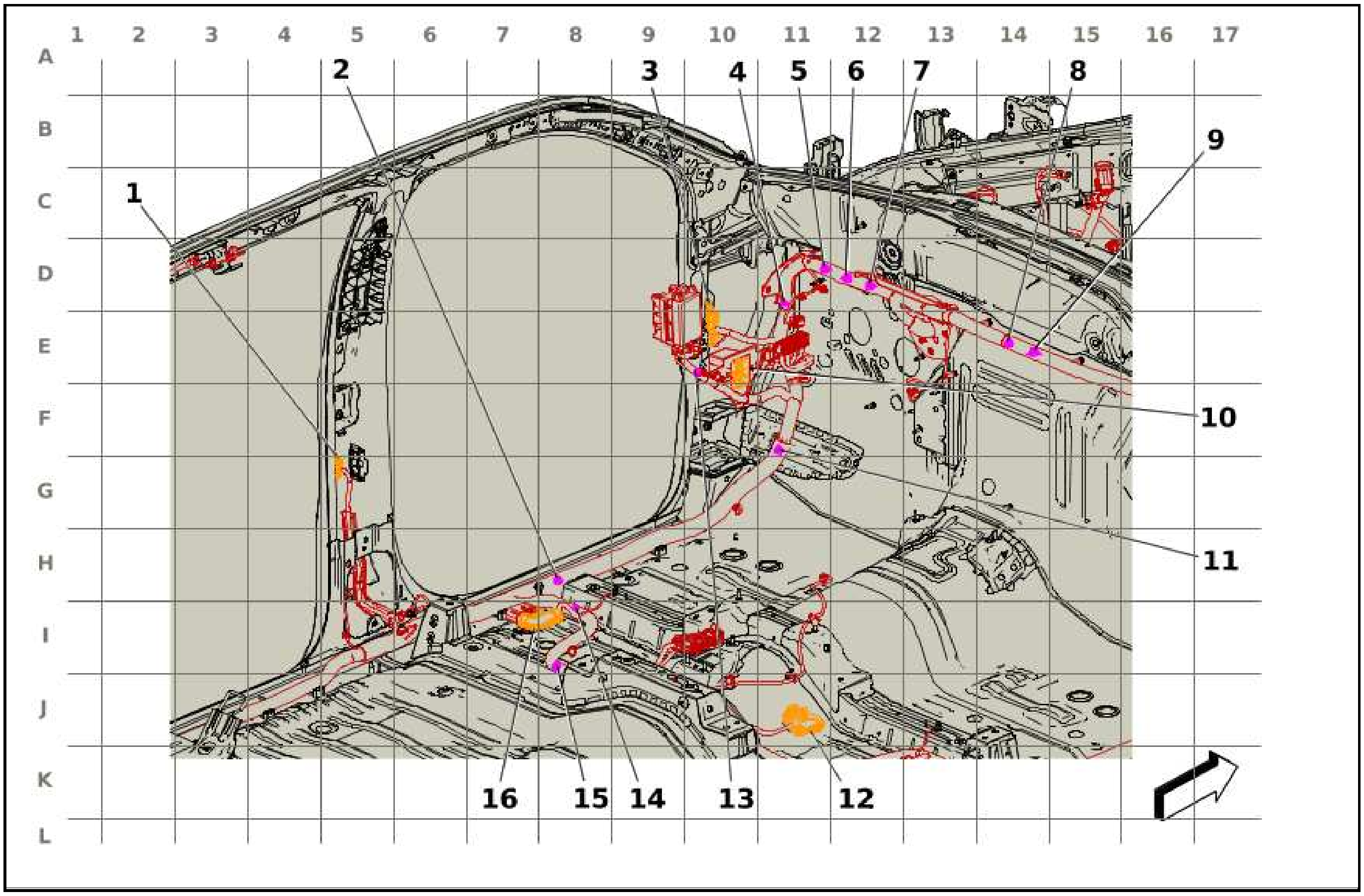


5034729

Items

(1)	X700 Left Rear Door Harness to Body Harness (Extended Cab/Crew Cab)
(2)	X500 Driver Door Harness to Body Harness
(3)	J281 Body Harness
(4)	J201 Body Harness
(5)	J200 Body Harness
(6)	X225 Instrument Panel Harness to Body Harness
(7)	J209 Body Harness
(8)	J210 Body Harness (A48)
(9)	J321 Body Harness ((BTM+(BOP/UD5/UD7)/((UD5/UD7)+BOP))
(10)	J327 Body Harness
(11)	X310 Driver Seat Harness to Body Harness
(12)	J325 Body Harness

Harness Routing Views (Passenger Compartment - Body Harness - Left Front (Crew Cab))

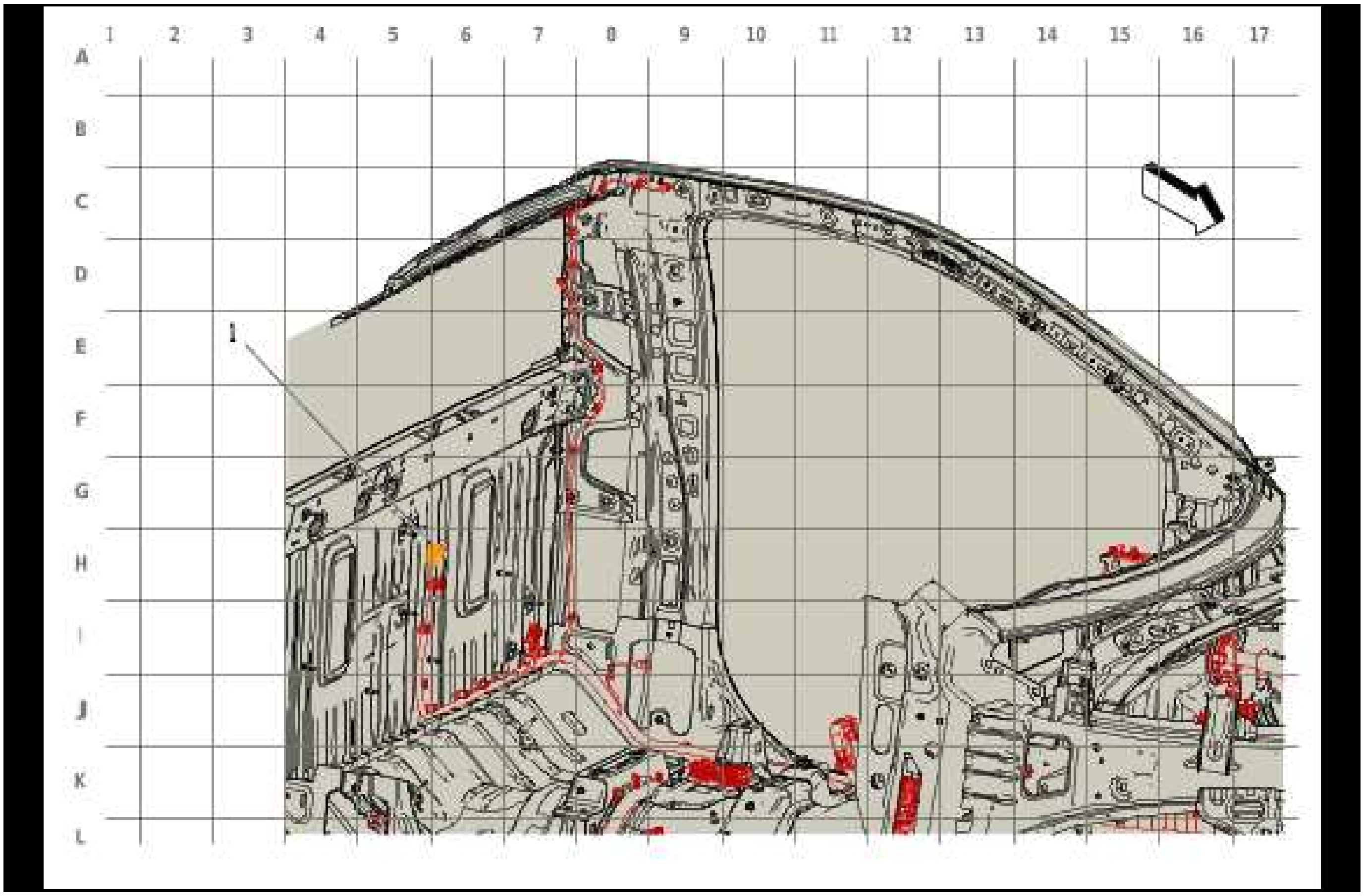


5034730

Items

(1)	X700 Left Rear Door Harness to Body Harness (Extended Cab/Crew Cab)
(2)	J325 Body Harness
(3)	X500 Driver Door Harness to Body Harness
(4)	J281 Body Harness
(5)	J327 Body Harness
(6)	J201 Body Harness
(7)	J200 Body Harness
(8)	J203 Body Harness
(9)	J202 Body Harness
(10)	X225 Instrument Panel Harness to Body Harness
(11)	J209 Body Harness
(12)	X348 Body Harness to Floor Console Harness
(13)	J210 Body Harness (A48)
(14)	J321 Body Harness ((BTM+(BOP/UD5/ UD7)/((UD5/UD7)+BOP))
(15)	J327 Body Harness
(16)	X310 Driver Seat Harness to Body Harness

Harness Routing Views (Passenger Compartment - Body Harness - Left Rear (Regular Cab))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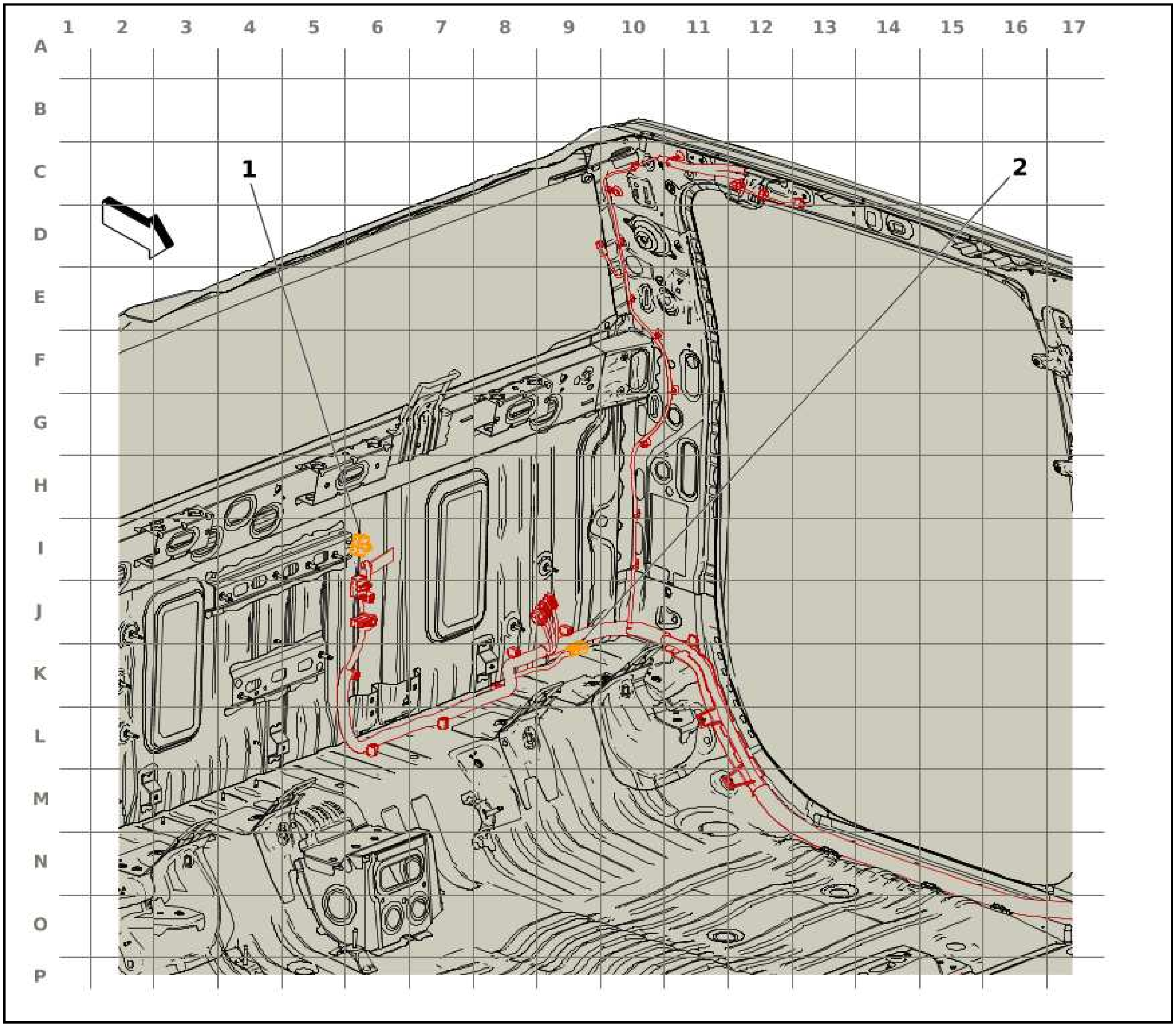
5023361

Items

(1)	X241 Body Harness to Inverter Module Jumper Harness (KI4/KI5)

Harness Routing Views (Passenger Compartment - Body Harness - Left Rear (Extended Cab/Crew Cab))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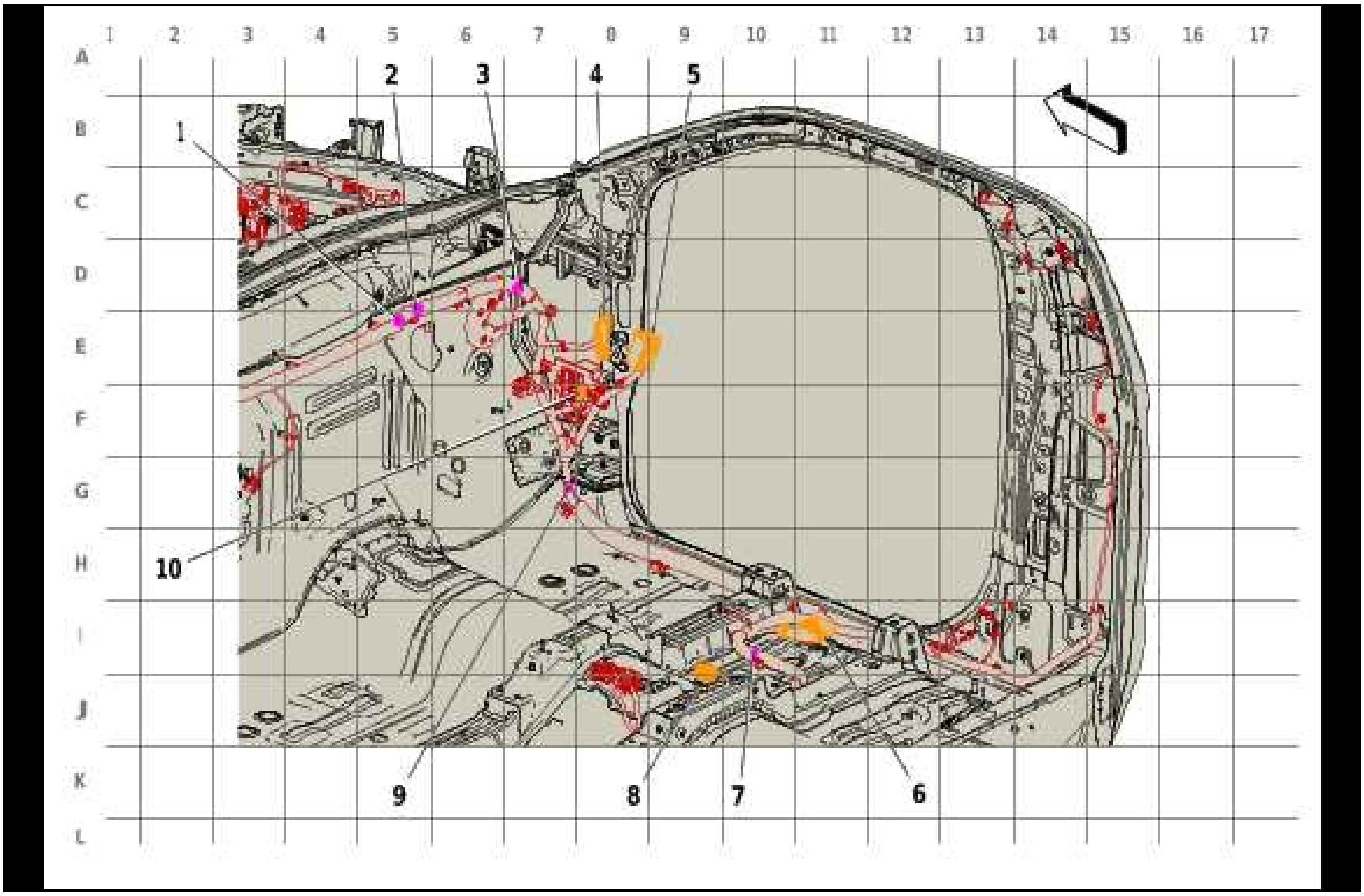
5034731

Items

(1) X241 Body Harness to Inverter Module Jumper Harness (KI4/KI5)

(2) X370 Body Harness to Rear Seat Harness (KA6)

Harness Routing Views (Passenger Compartment - Body Harness - Right Front (Regular Cab))



5023362

Items

(1) J206 Body Harness

(2) J207 Body Harness

(3) J208 Body Harness

(4) X600 Passenger Door Harness to Body Harness

(5) X275 Instrument Panel Harness to Body Harness

(6) X320 Passenger Seat Harness to Body Harness

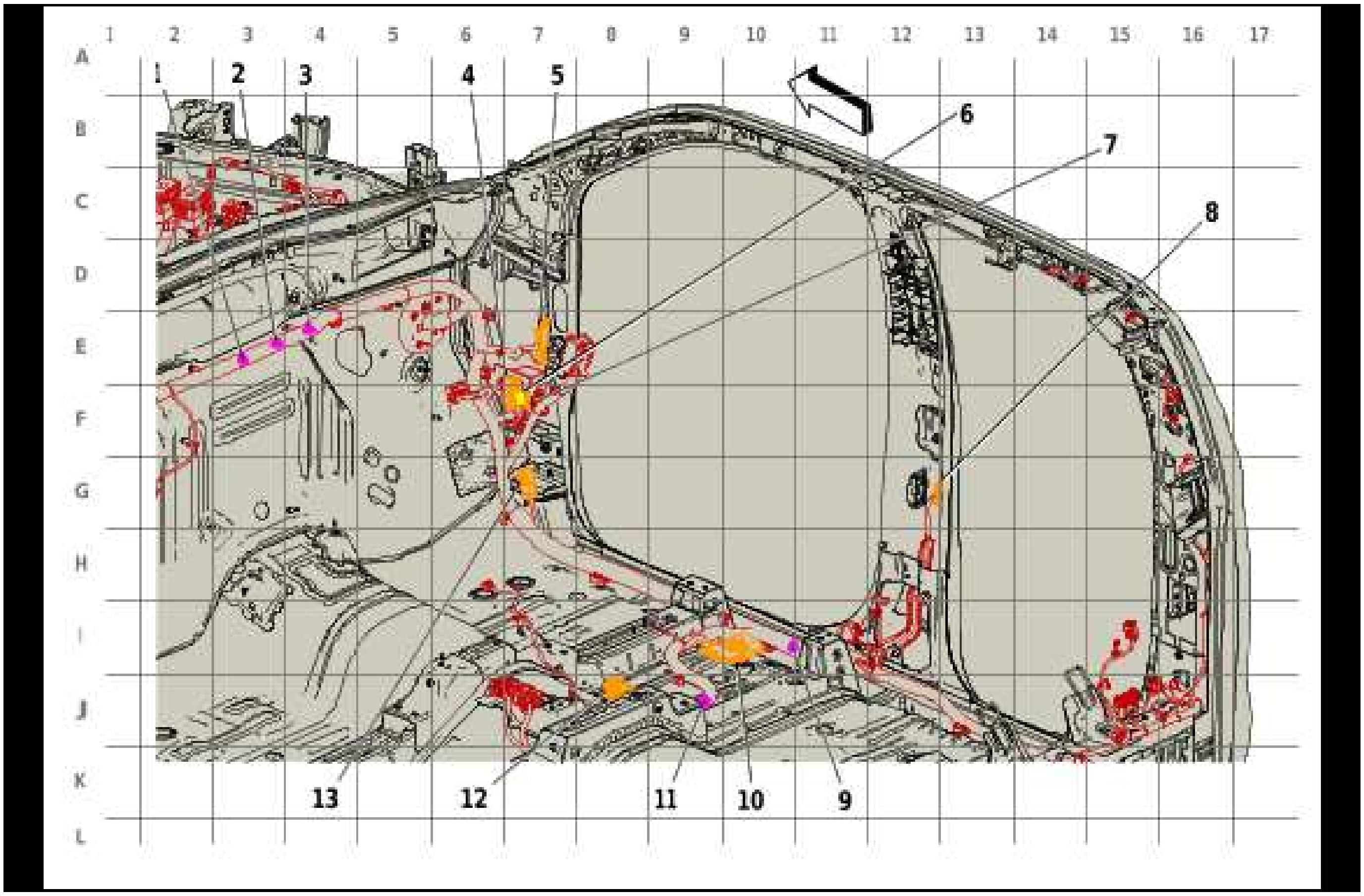
(7) J326 Body Harness

(8) X348 Body Harness to Floor Console Harness

(9) J282 Body Harness

(10) X209 Body Harness to Instrument Panel Harness (UVB)

Harness Routing Views (Passenger Compartment - Body Harness - Right Front (Extended Cab))

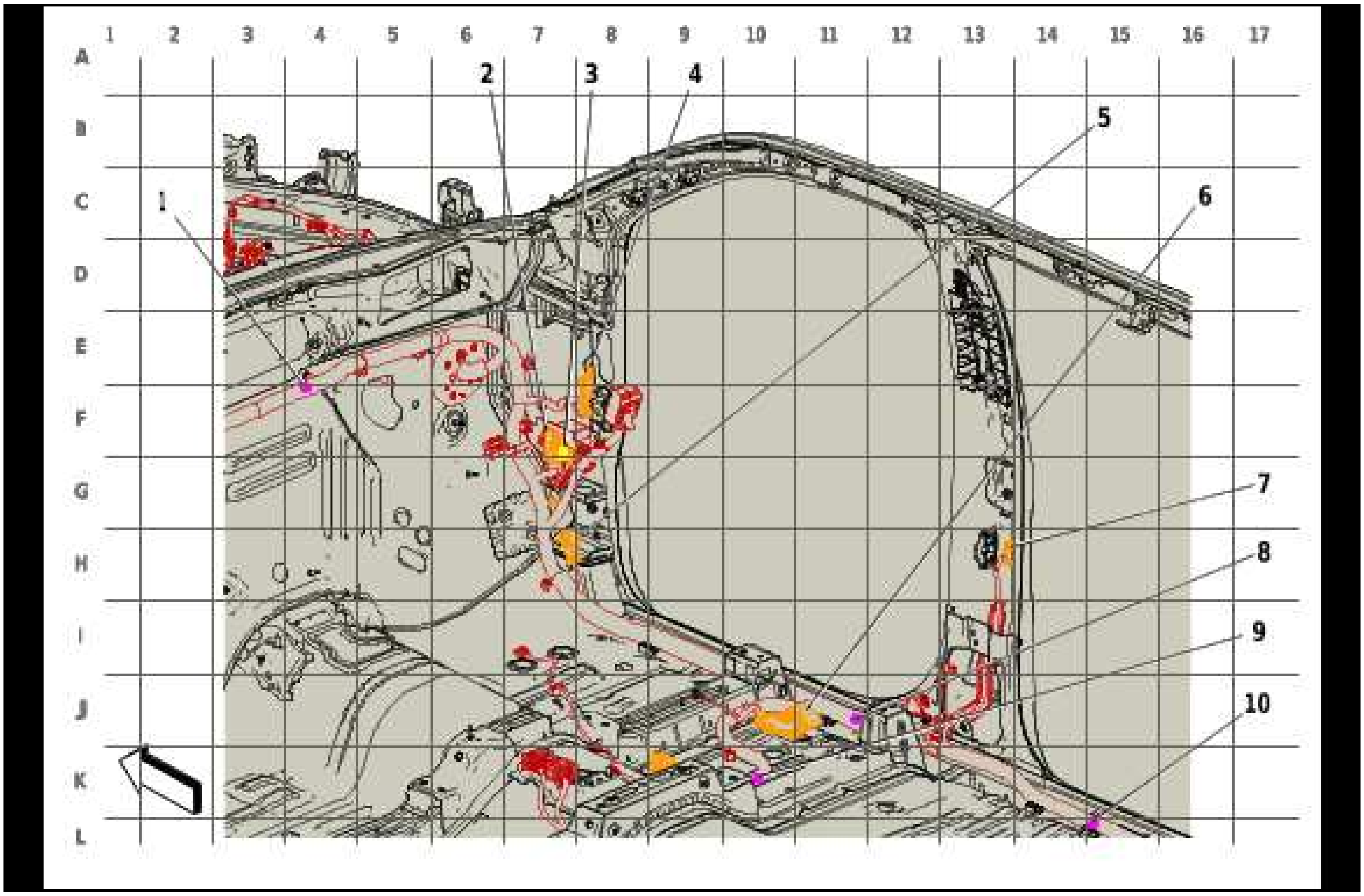


5480322

Items

(1)	J203 Body Harness
(2)	J202 Body Harness
(3)	J207 Body Harness
(4)	X275 Instrument Panel Harness to Body Harness
(5)	X600 Passenger Door Harness to Body Harness
(6)	X209 Body Harness to Instrument Panel Harness (UVB)
(7)	X211 Instrument Panel Harness to Body Harness
(8)	X800 Right Rear Door Harness to Body Harness (Extended Cab/Crew Cab)
(9)	J326 Body Harness
(10)	X320 Passenger Seat Harness to Body Harness
(11)	J282 Body Harness
(12)	X348 Body Harness to Floor Console Harness
(13)	X250 Electrical Auxiliary Heater Jumper Harness to Body Harness (C32)

Harness Routing Views (Passenger Compartment - Body Harness - Right Front (Crew Cab))

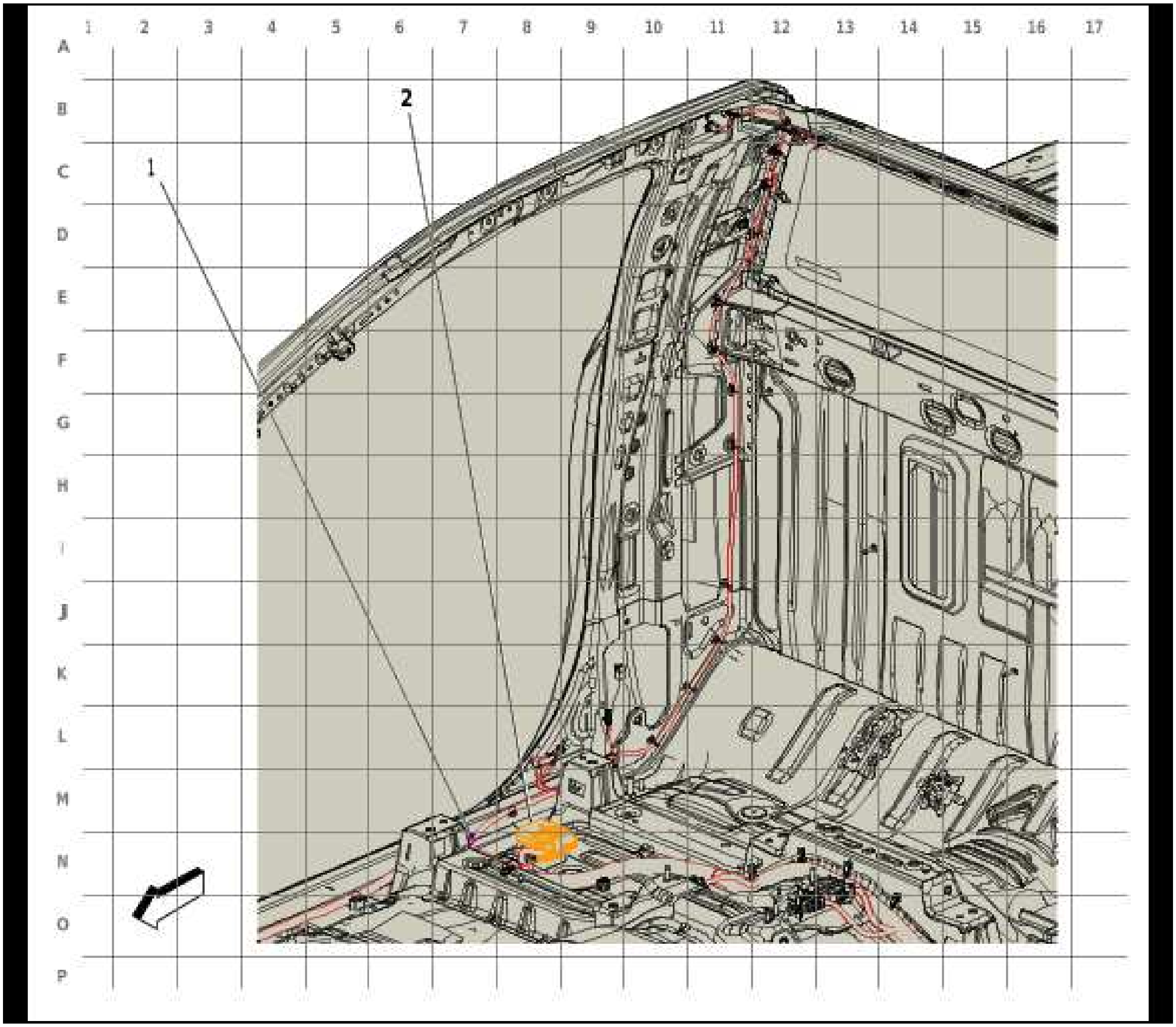


5480323

Items

(1)	J207 Body Harness
(2)	X275 Instrument Panel Harness to Body Harness
(3)	X209 Body Harness to Instrument Panel Harness (UVB)
(4)	X600 Passenger Door Harness to Body Harness
(5)	X250 Electrical Auxiliary Heater Jumper Harness to Body Harness (C32)
(6)	X320 Passenger Seat Harness to Body Harness
(7)	X800 Right Rear Door Harness to Body Harness (Extended Cab/Crew Cab)
(8)	J326 Body Harness
(9)	J323 Body Harness
(10)	J330 Body Harness (UVI/UVS)

Harness Routing Views (Passenger Compartment - Body Harness - Right Rear (Regular Cab))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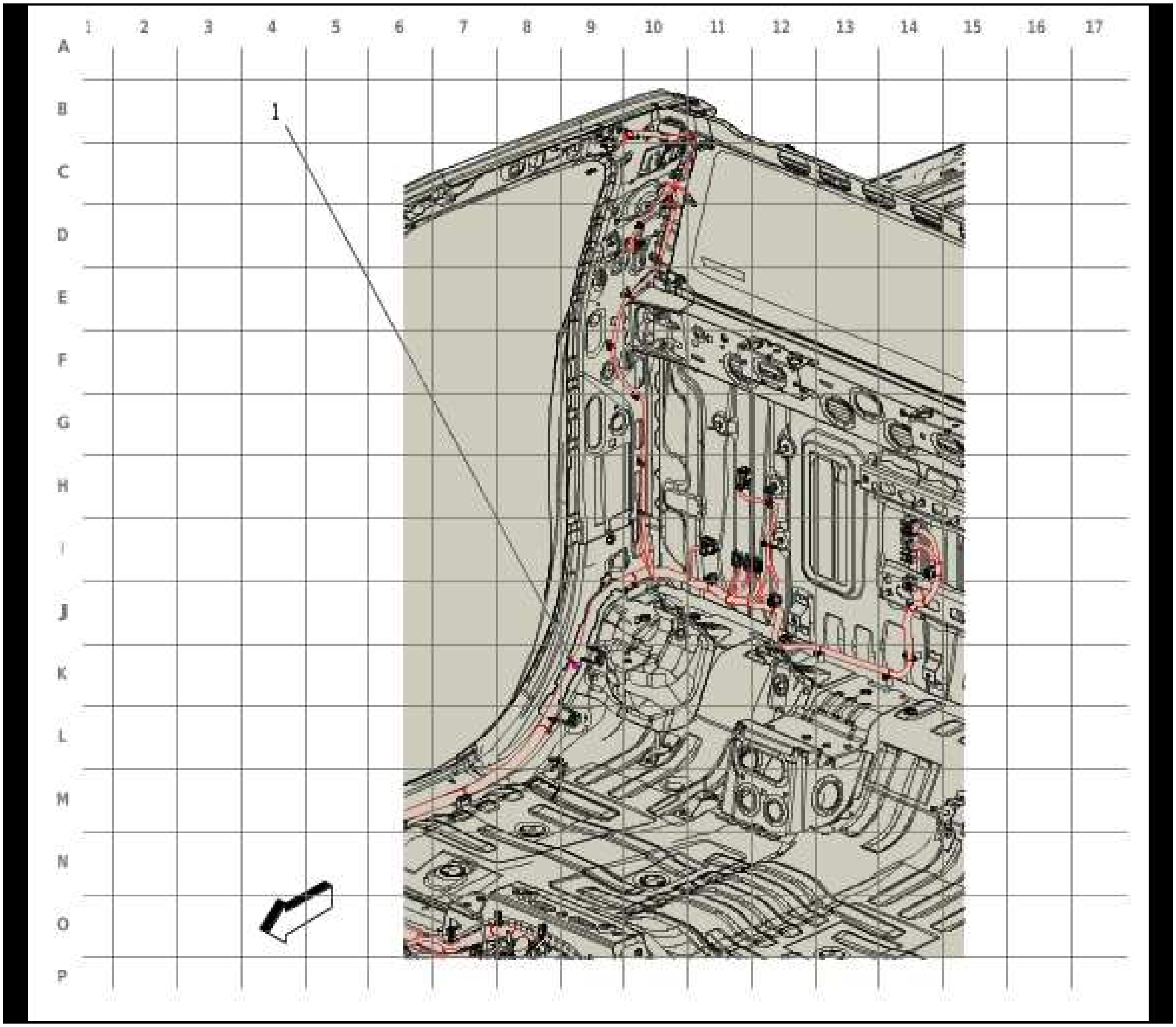
5813038

Items

(1)	J326 Body Harness
(2)	X320 Passenger Seat Harness to Body Harness

Harness Routing Views (Passenger Compartment - Body Harness - Right Rear (Extended Cab/Crew Cab))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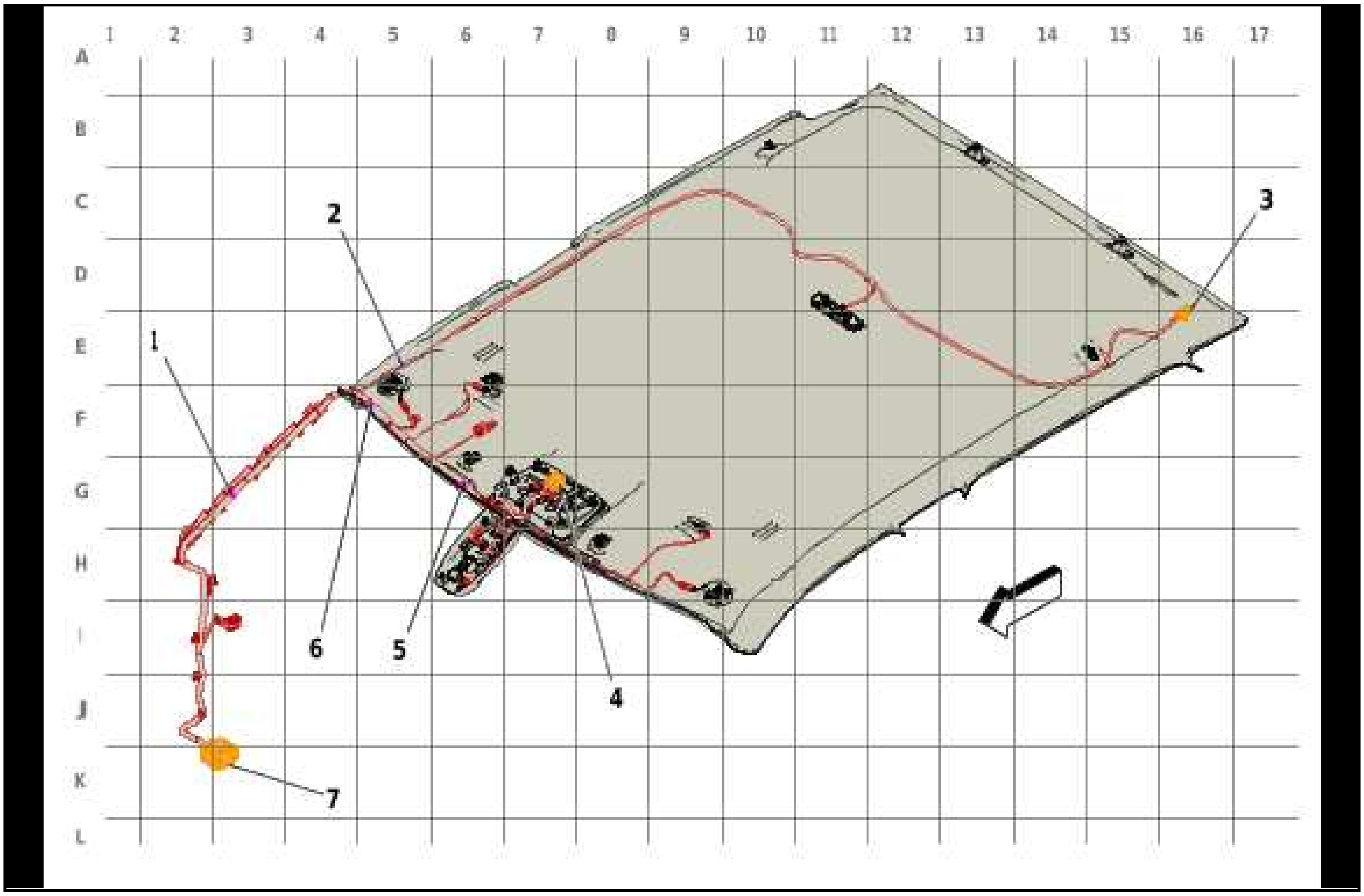
5813039

Items

(1) J330 Body Harness (UVI/UVS)

Harness Routing Views (Roof - Headliner Harness (Extended Cab/Crew Cab))



5023363

Items

(1) J351 Headliner Harness

(2) J355 Headliner Harness (Extended Cab/ Crew Cab)

(3) X380 Center High Mount Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)

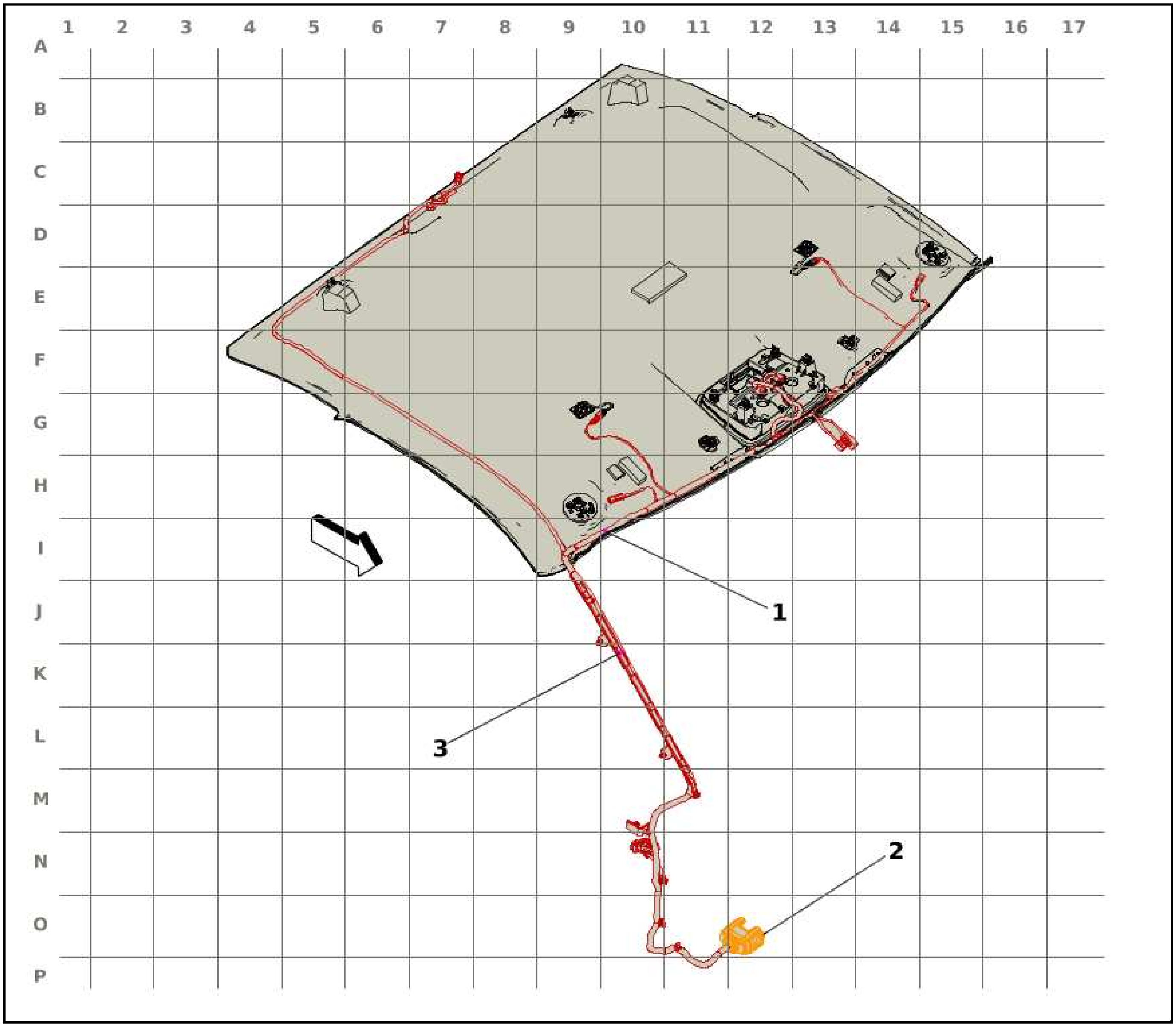
(4) X318 Sunroof Motor Harness to Headliner Harness (CF5)

(5) J354 Headliner Harness (DD8/DRZ/UEU)

(6) J353 Headliner Harness (DH6)

(7) X256 Headliner Harness to Instrument Panel Harness

Harness Routing Views (Roof - Headliner Harness (Regular Cab))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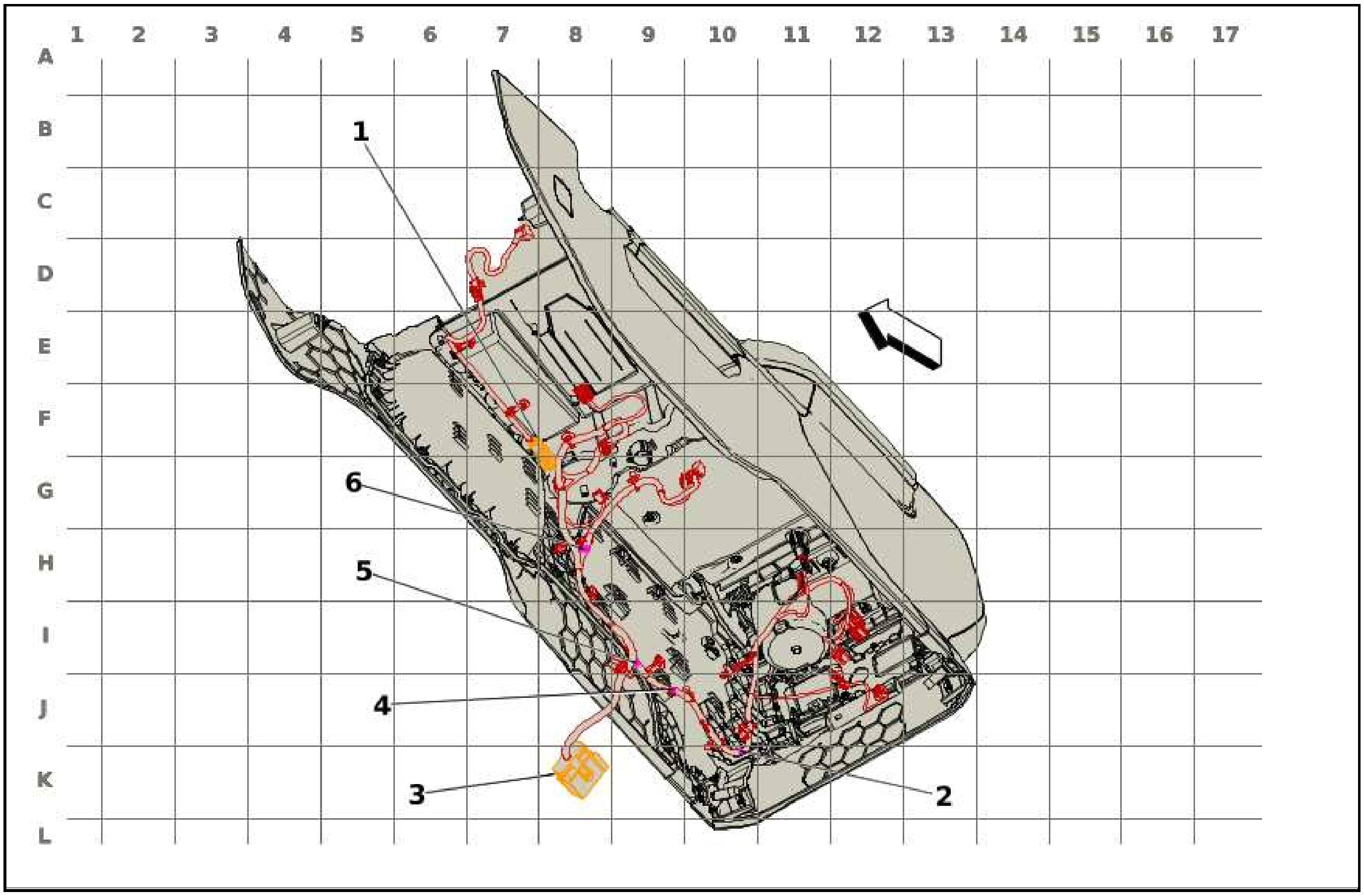
5002842

Items

(1)	J353 Headliner Harness (DH6)
(2)	X256 Headliner Harness to Instrument Panel Harness
(3)	J351 Headliner Harness

Harness Routing Views (Center Console - Floor Console Harness)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5002843

Items

(1) X255 USB Receptacle Jumper Harness to Floor Console Harness (D07+(IOS/IOT))

(2) J335 Floor Console Harness (AZ3/D07)

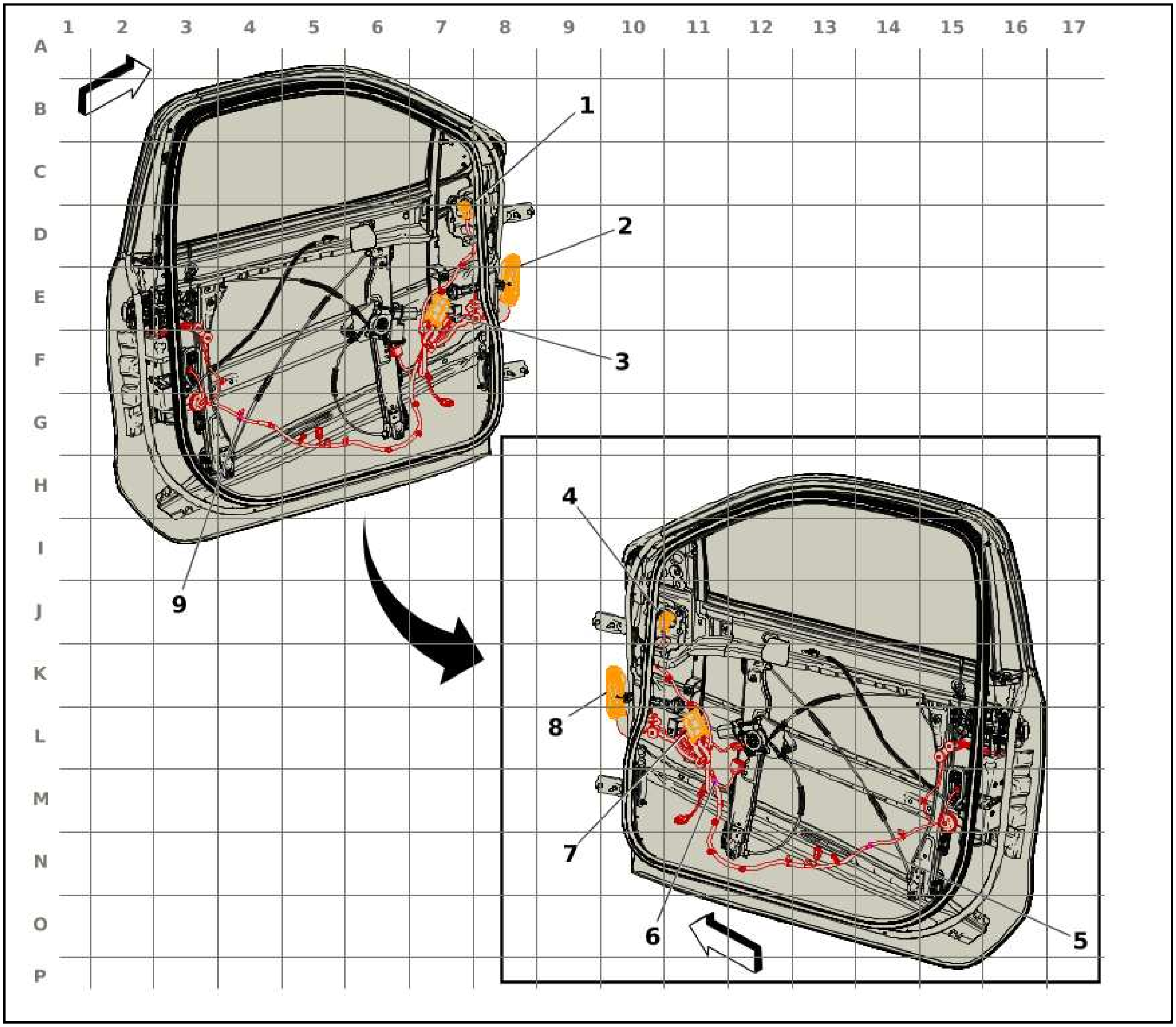
(3) X348 Body Harness to Floor Console Harness

(4) J334 Floor Console Harness (D07)

(5) J333 Floor Console Harness (KA6)

(6) J336 Floor Console Harness (IOS/IOT)

Harness Routing Views (Doors - Driver and Passenger Door Harnesses)



5002840

Items

(1) X510 Driver Door Harness to Driver Outside Rearview Mirror Harness

(2) X500 Driver Door Harness to Body Harness

(3) X505 Driver Door Harness to Driver Door Trim Harness

(4) X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness

(5) J602 Passenger Door Harness

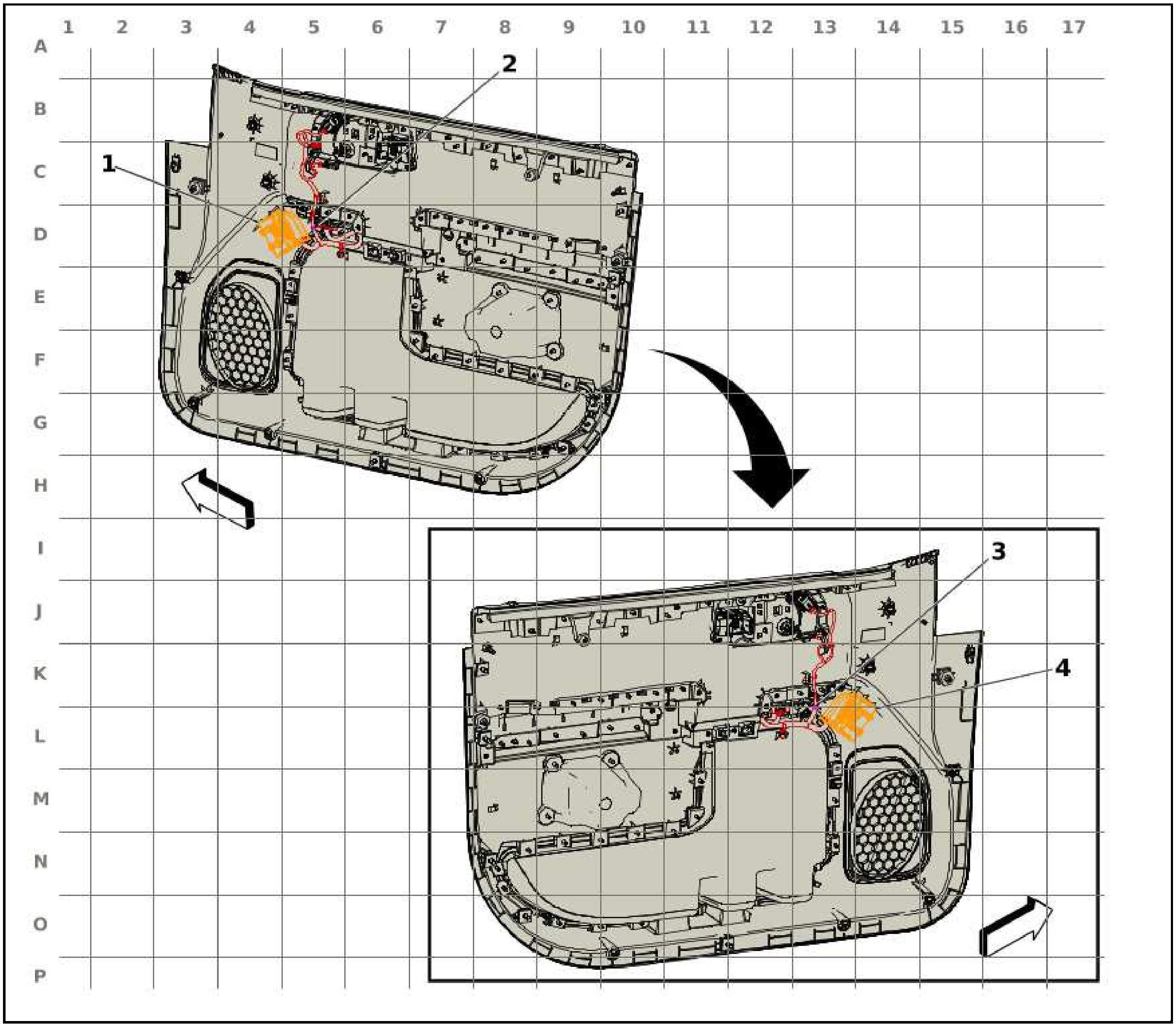
(6) J601 Passenger Door Harness (AEF)

(7) X605 Passenger Door Harness to Passenger Door Trim Harness

(8) X600 Passenger Door Harness to Body Harness

(9) J502 Driver Door Harness

Harness Routing Views (Doors - Driver and Passenger Door Trim Harnessses)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5002841

Items

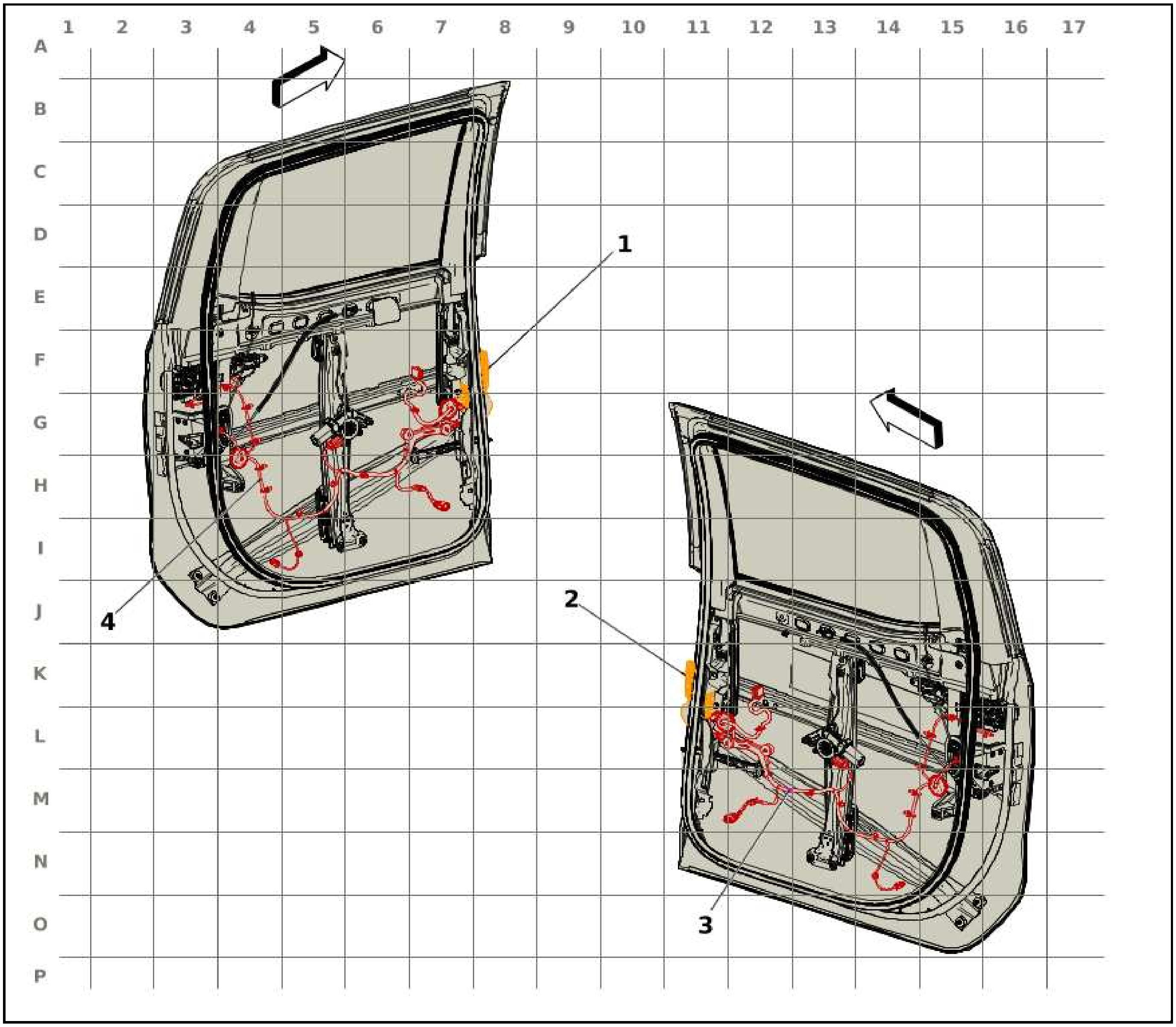
(1) X505 Driver Door Harness to Driver Door Trim Harness

(2) J503 Driver Door Trim Harness

(3) J603 Passenger Door Harness

(4) X605 Passenger Door Harness to Passenger Door Trim Harness

Harness Routing Views (Doors - Left Rear and Right Rear Door Harnesses (Extended Cab))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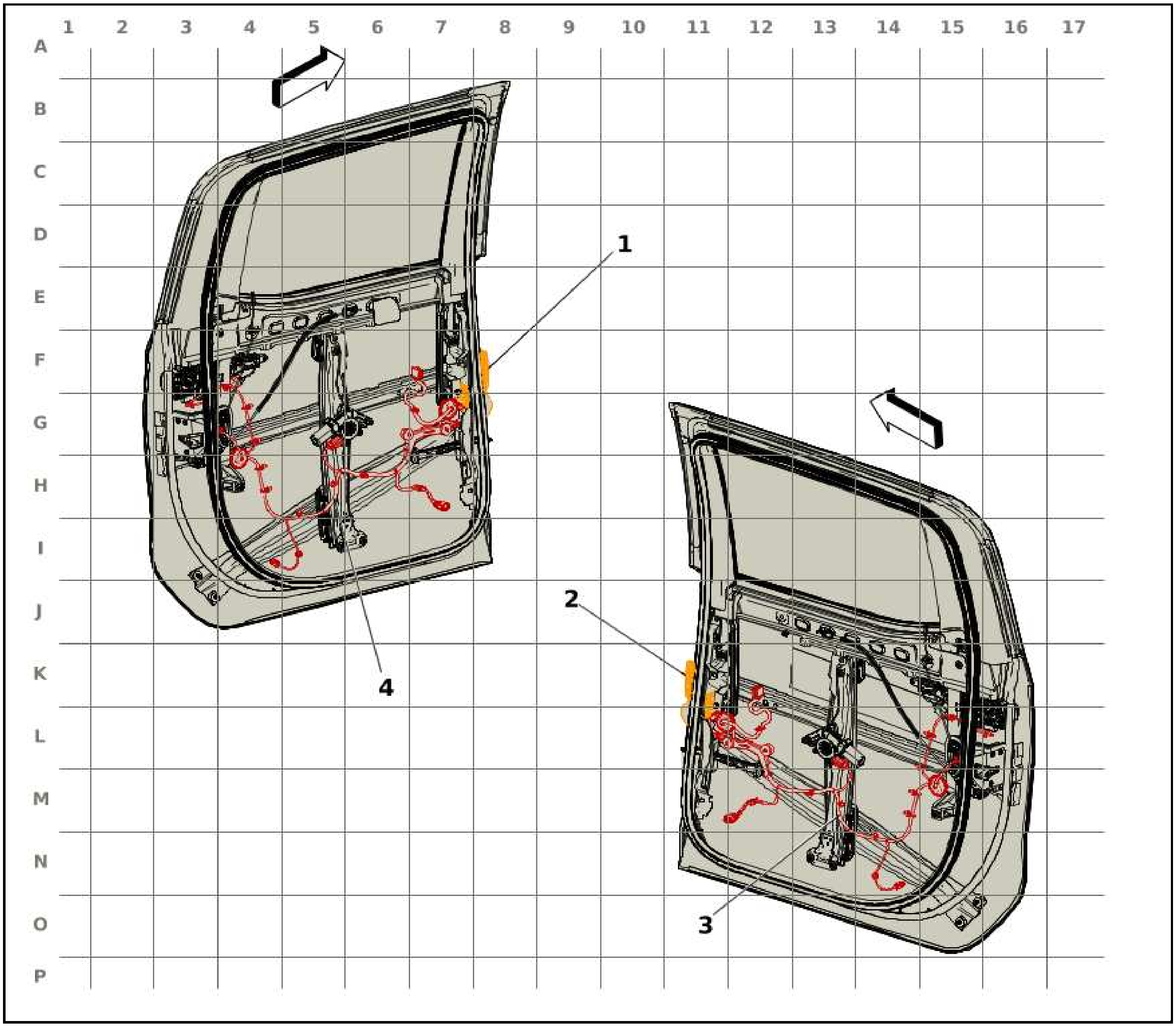
5034734

Items

(1)	X700 Left Rear Door Harness to Body Harness (Extended Cab/Crew Cab)
(2)	X800 Right Rear Door Harness to Body Harness (Extended Cab/Crew Cab)
(3)	J801 Right Rear Door Harness (Extended Cab/Crew Cab)
(4)	J701 Left Rear Door Harness (Extended Cab/Crew Cab)

Harness Routing Views (Doors - Left Rear and Right Rear Door Harnesses (Crew Cab))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5034735

Items

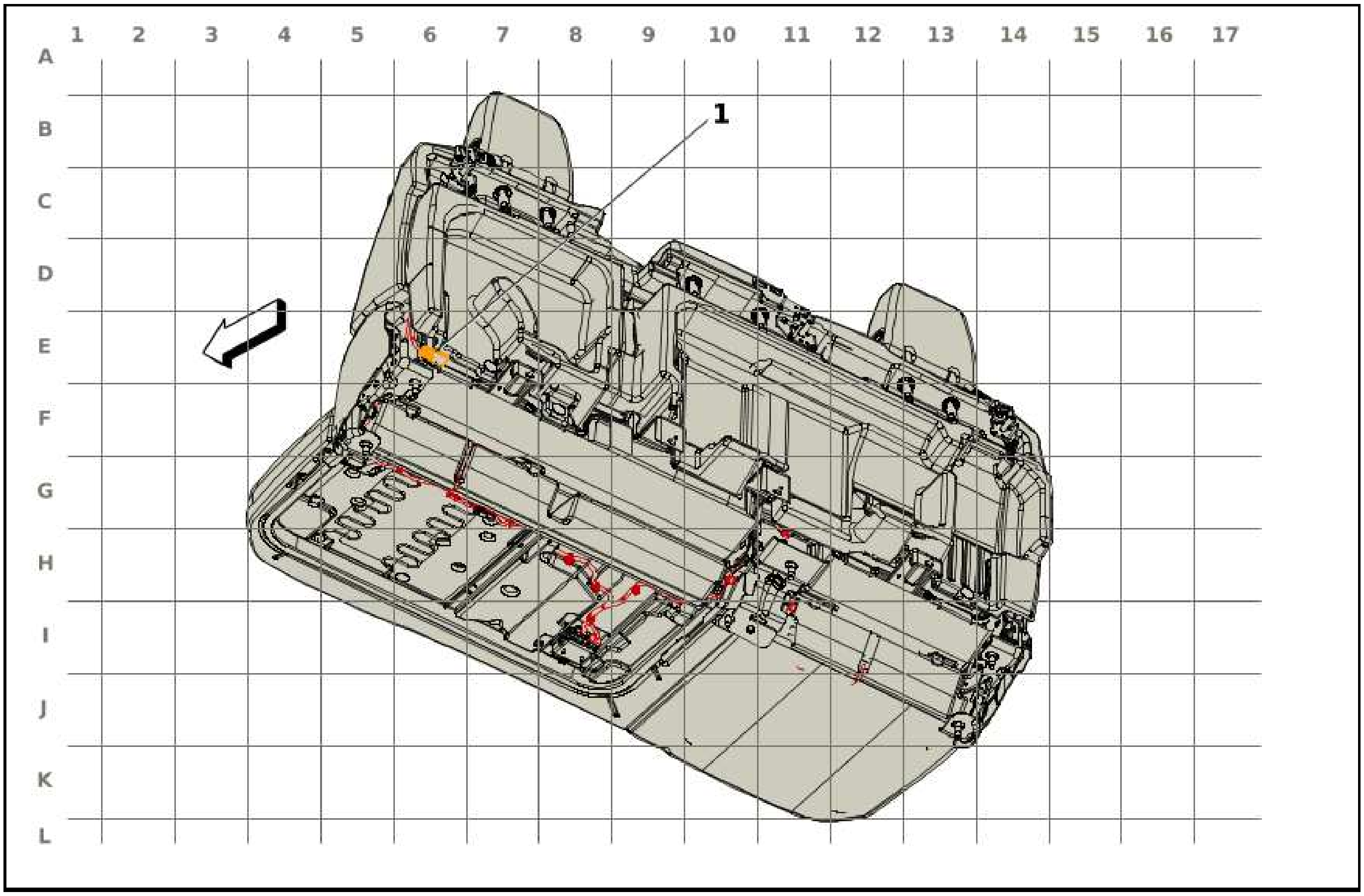
(1) X700 Left Rear Door Harness to Body Harness (Extended Cab/Crew Cab)

(2) X800 Right Rear Door Harness to Body Harness (Extended Cab/Crew Cab)

(3) J801 Right Rear Door Harness (Extended Cab/Crew Cab)

(4) J701 Left Rear Door Harness (Extended Cab/Crew Cab)

Harness Routing Views (Passenger Compartment - Rear Seat Harness (Extended Cab/ Crew Cab))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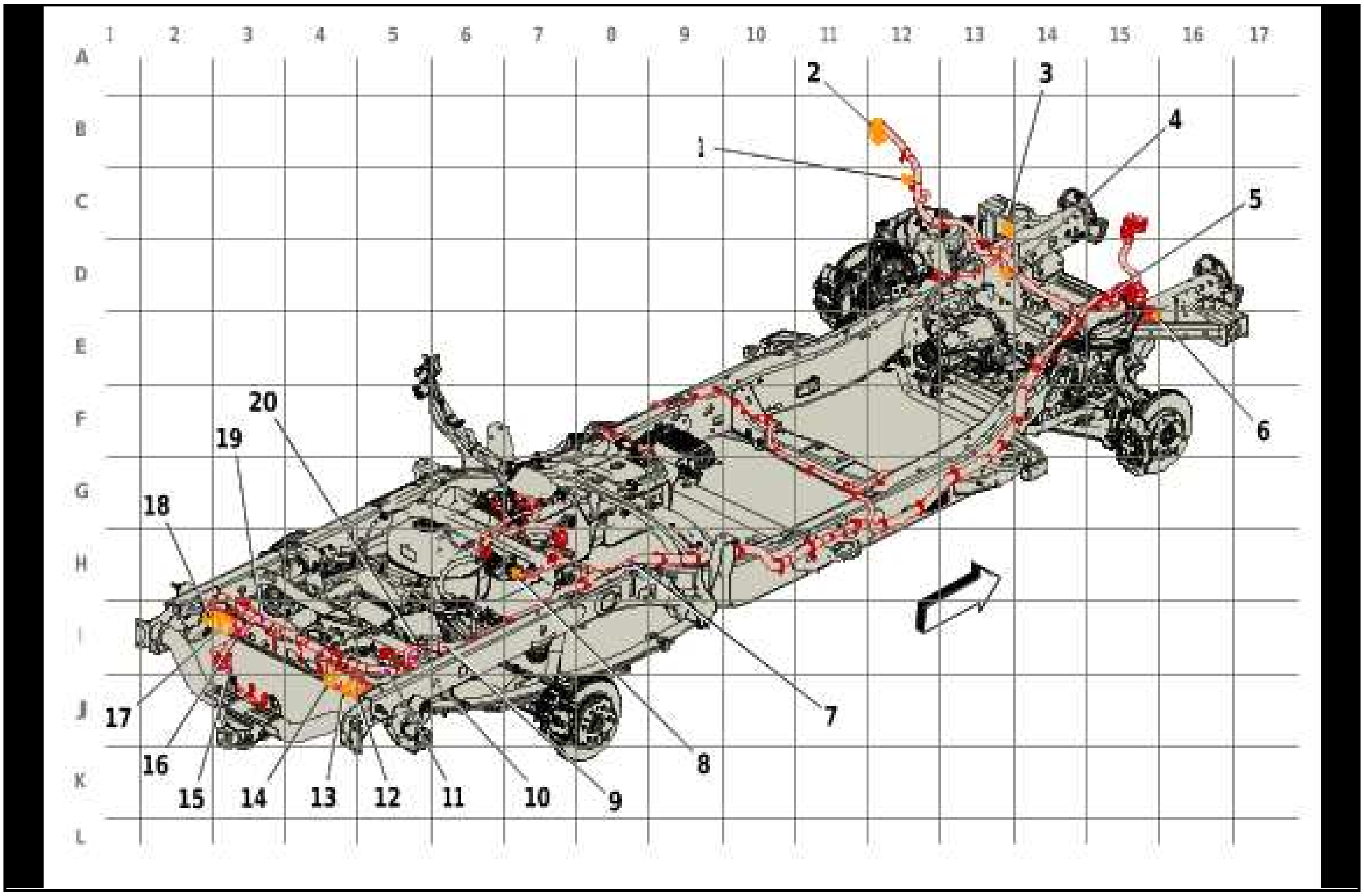
5034208

Items

(1) X370 Body Harness to Rear Seat Harness (KA6)

Harness Routing Views (Vehicle Underbody - Chassis Harness (Regular Cab))



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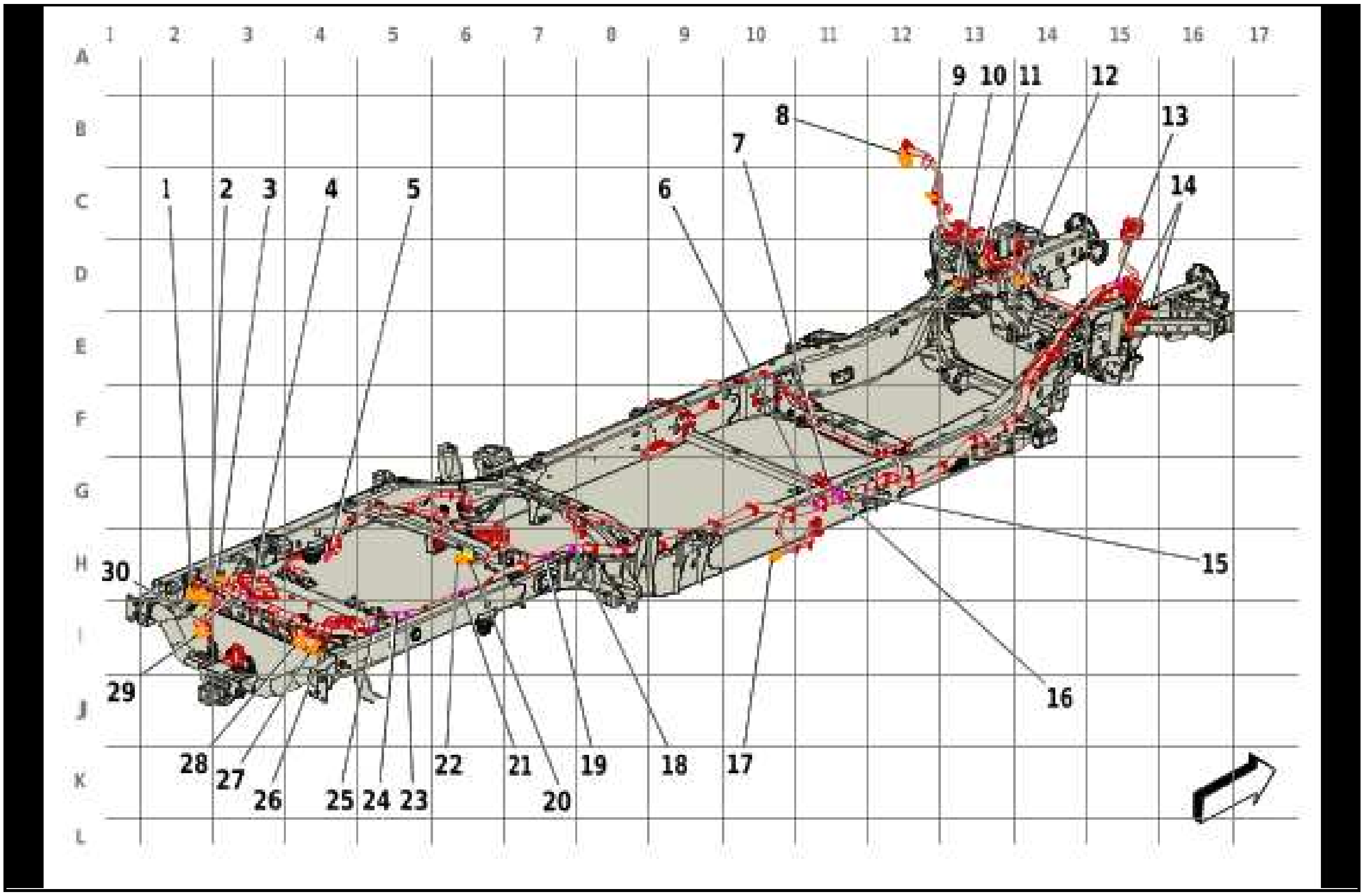
Items

(1)	X138 Body Harness to Chassis Harness
(2)	X140 Chassis Harness to Body Harness
(3)	X171 Engine Harness to Chassis Harness
(4)	X182 Chassis Harness to Power Steering Jumper Harness
(5)	J192 Chassis Harness (JL1)
(6)	X109 Chassis Harness to Body Harness (UV2/UVB/UVI)
(7)	J476 Chassis Harness
(8)	X415 Rear Axle Harness to Chassis Harness
(9)	J479 Chassis Harness (U1D)
(10)	J480 Chassis Harness
(11)	J477 Chassis Harness
(12)	X420 Right Tail Lamp Harness to Chassis Harness
(13)	X450 Power Inverter Module Jumper Harness to Chassis Harness (KC9/KCA)
(14)	X901 Rear Bumper Harness to Chassis Harness
(15)	J482 Chassis Harness (IOS/IOT)
(16)	J483 Chassis Harness (IOS/IOT)
(17)	X926 Endgate Harness to Chassis Harness (QK2/QT5)
(18)	X909 Endgate Harness to Chassis Harness (UV2/UVB/UVI)
(19)	J481 Chassis Harness
(20)	J478 Chassis Harness

Harness Routing Views (Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab))



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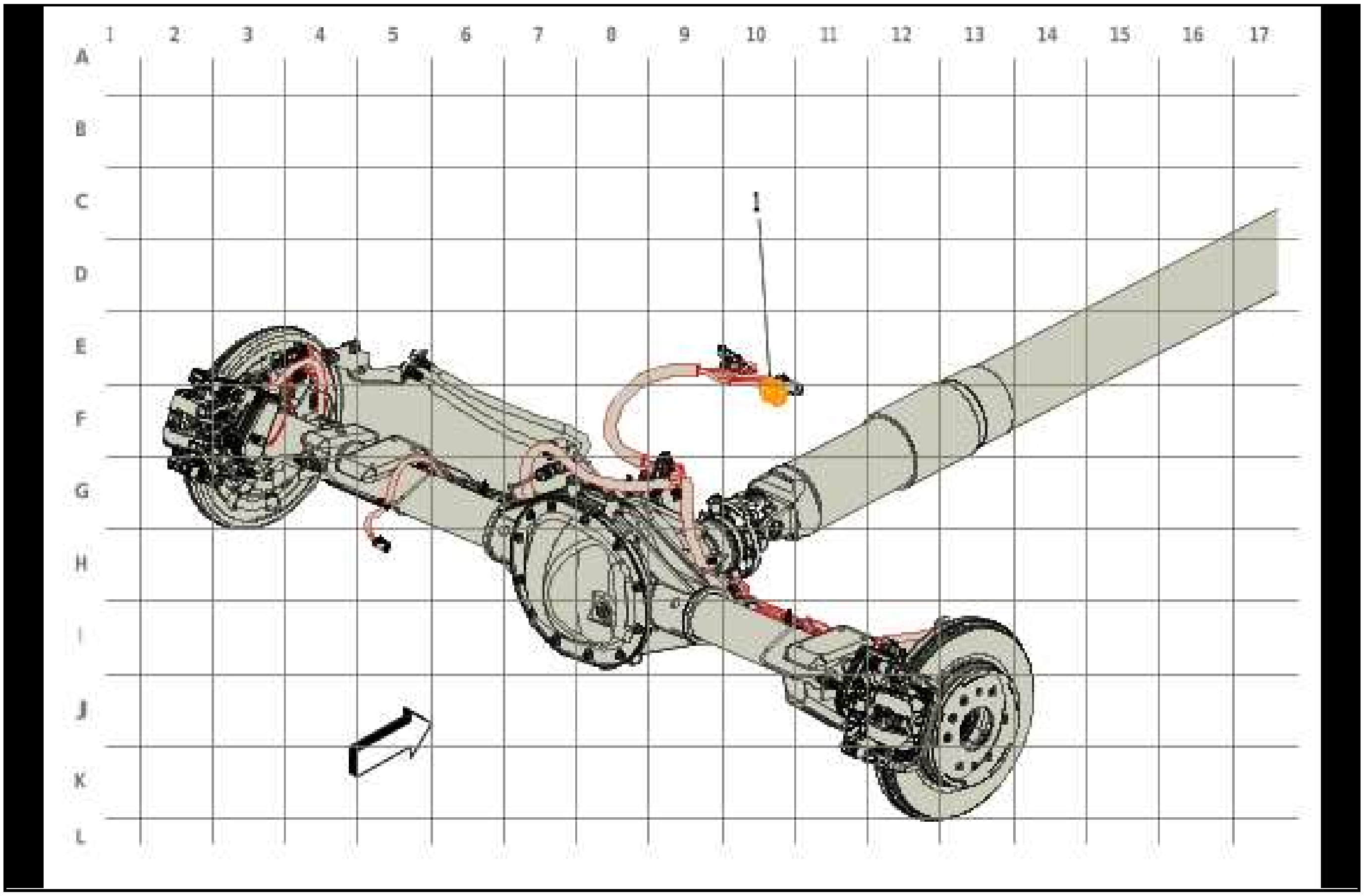
Items

(1)	X909 Endgate Harness to Chassis Harness (UV2/UVB/UVI)
(2)	X926 Endgate Harness to Chassis Harness (QK2/QT5)
(3)	X410 Left Tail Lamp Harness to Chassis Harness
(4)	J481 Chassis Harness
(5)	X418 Right Side Assist Step Jumper Harness to Chassis Harness (BRS)
(6)	J394 Chassis Harness (BRS)
(7)	J392 Chassis Harness (LM2)
(8)	X140 Chassis Harness to Body Harness
(9)	X138 Body Harness to Chassis Harness
(10)	X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)
(11)	X171 Engine Harness to Chassis Harness
(12)	X182 Chassis Harness to Power Steering Jumper Harness
(13)	J192 Chassis Harness (JL1)
(14)	X109 Chassis Harness to Body Harness (UV2/UVB/UVI)
(15)	J391 Chassis Harness (LM2)
(16)	J393 Chassis Harness (LM2)
(17)	X418 Right Side Assist Step Jumper Harness to Chassis Harness (BRS)
(18)	J475 Chassis Harness (LM2)
(19)	J476 Chassis Harness
(20)	X436 Rear Axle Harness to Chassis Harness
(21)	J477 Chassis Harness
(22)	X415 Rear Axle Harness to Chassis Harness
(23)	J478 Chassis Harness
(24)	J479 Chassis Harness (U1D)
(25)	J480 Chassis Harness
(26)	X420 Right Tail Lamp Harness to Chassis Harness
(27)	X450 Power Inverter Module Jumper Harness to Chassis Harness (KC9/KCA)
(28)	X901 Rear Bumper Harness to Chassis Harness
(29)	J482 Chassis Harness (IOS/IOT)
(30)	J483 Chassis Harness (IOS/IOT)

Harness Routing Views (Vehicle Underbody - Rear Chassis Extension Harness)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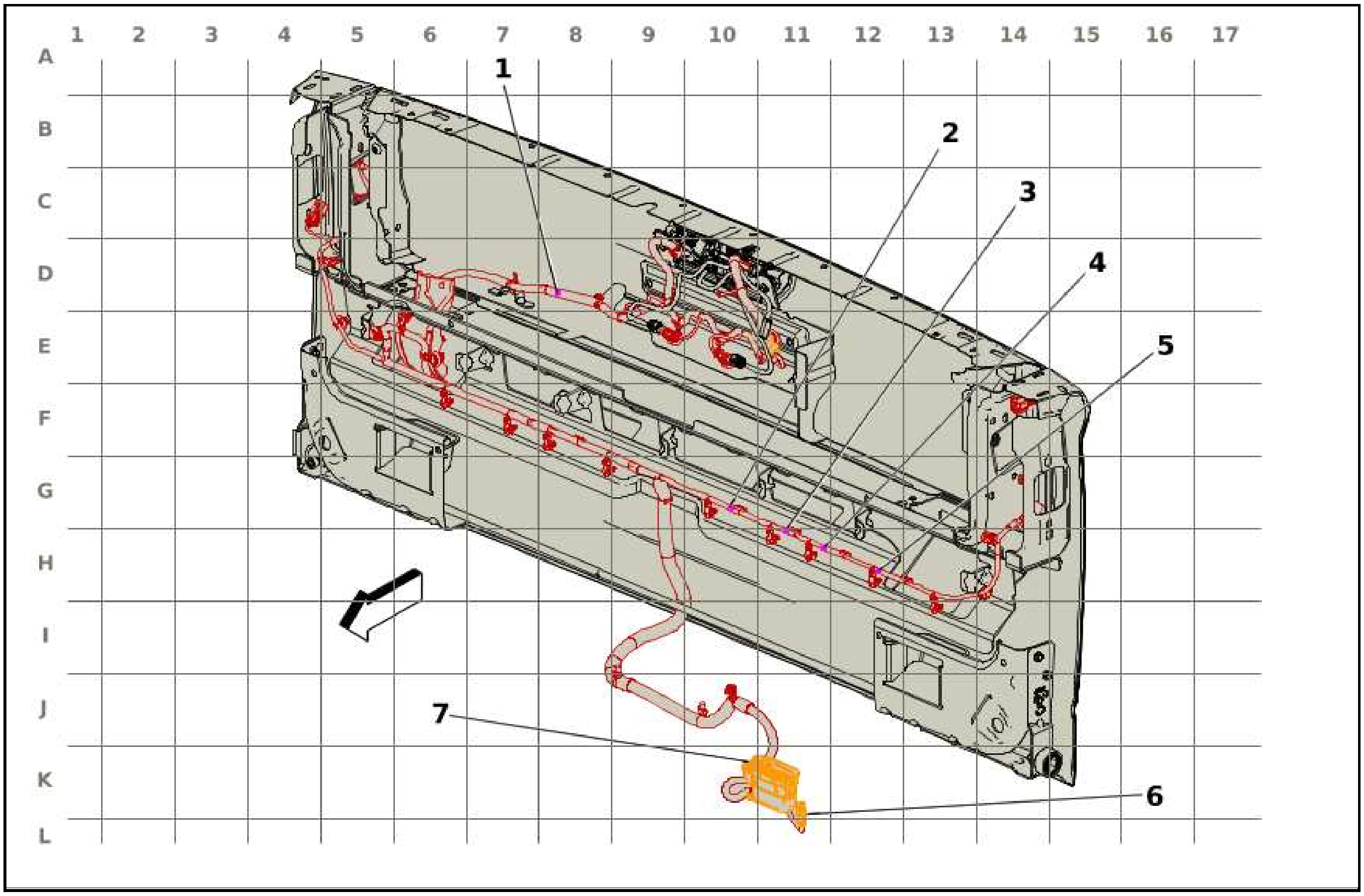
Items

(1) X415 Rear Axle Harness to Chassis Harness

Harness Routing Views (Rear of Vehicle - Endgate Harness (QK2))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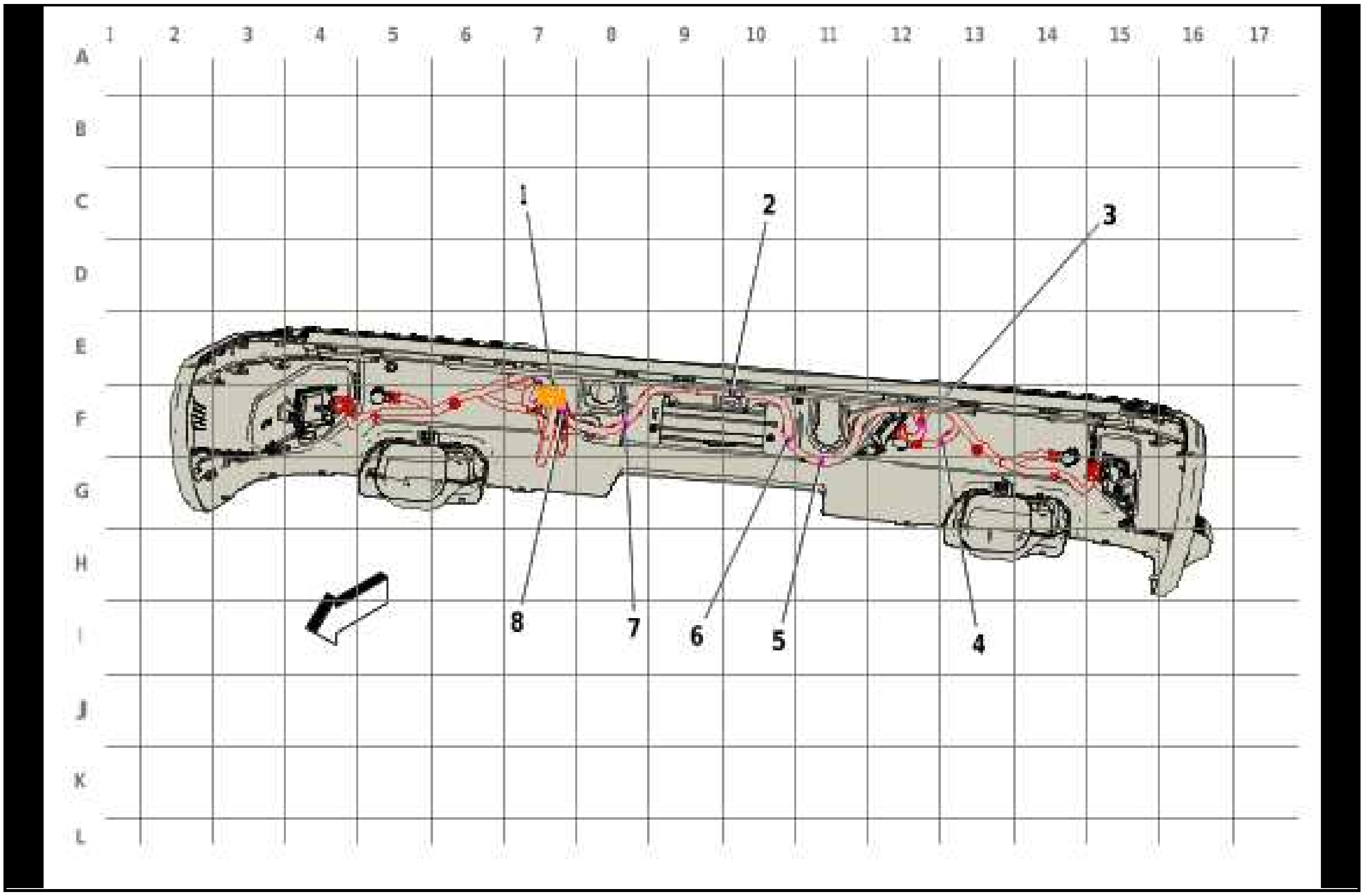
5034737

Items

(1)	J904 Endgate Harness (QT5/QT6)
(2)	J900 Endgate Harness (QT5)
(3)	J901 Endgate Harness (QT5)
(4)	J902 Endgate Harness (QK2)
(5)	J903 Endgate Harness (QK2)
(6)	X909 Endgate Harness to Chassis Harness (UV2/UVB/UVI)
(7)	X926 Endgate Harness to Chassis Harness (QK2/QT5)

Harness Routing Views (Rear of Vehicle - Rear Bumper Harness)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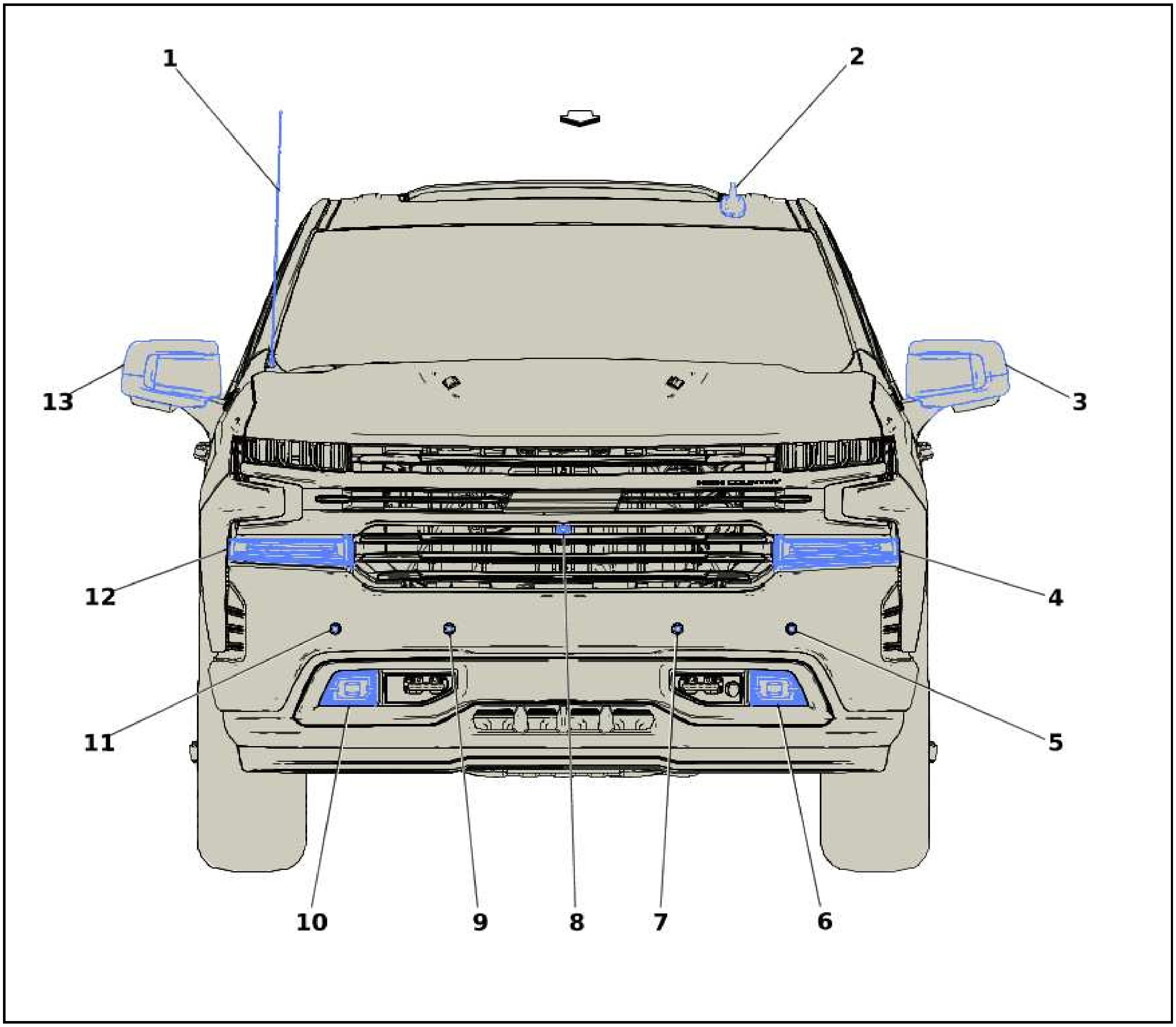
Items

(1)	X901 Rear Bumper Harness to Chassis Harness
(2)	J492 Rear Bumper Harness (UKC)
(3)	J496 Rear Bumper Harness (E63)
(4)	J495 Rear Bumper Harness (UD5/UD7)
(5)	J490 Rear Bumper Harness (UD5/UD7)
(6)	J491 Rear Bumper Harness (UKC)
(7)	J493 Rear Bumper Harness (UKC)
(8)	J494 Rear Bumper Harness (E63)

Component Locator

Front of Vehicle/Engine Compartment Component Views

Front of Vehicle Components (X88)



5002845

Items

(1) T4M Radio Antenna

(2) T4G Cellular Phone, Navigation, and Digital Radio Antenna

(3) A9A Outside Rearview Mirror - Driver

(4) E13LA Headlamp Assembly - Left

(5) B306A Parking Assist Sensor - Front Left Outer (UD5)

(6) E29LF Fog Lamp - Left Front (S3U/T3U)

(7) B306B Parking Assist Sensor - Front Left Middle (UD5)

(8) B174G Frontview Camera - Grille (UVS)

(9) B306C Parking Assist Sensor - Front Right Middle (UD5)

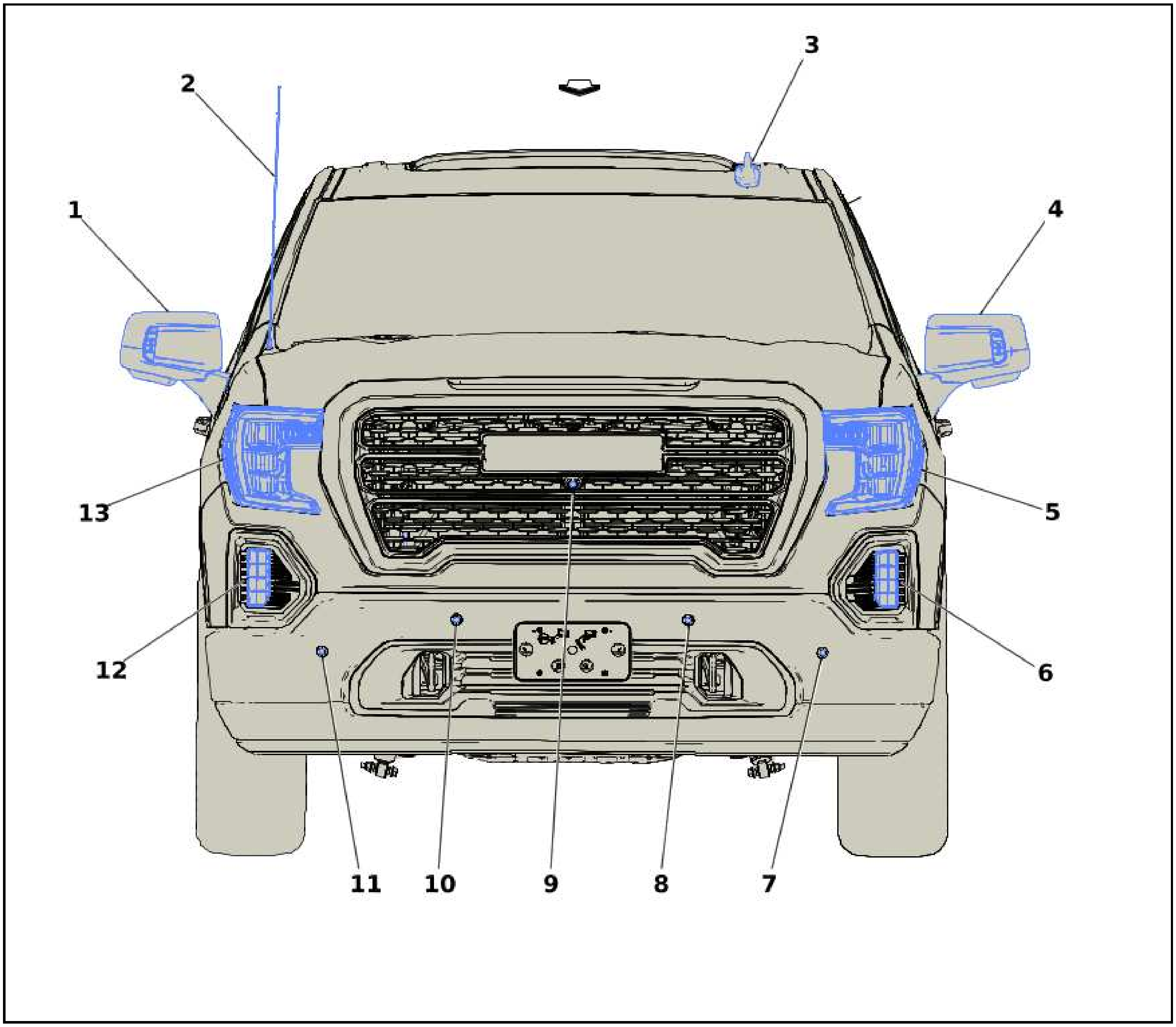
(10) E29RF Fog Lamp - Right Front (S3U/T3U)

(11) B306D Parking Assist Sensor - Front Right Outer (UD5)

(12) E13RA Headlamp Assembly - Right

(13) A9B Outside Rearview Mirror - Passenger

Front of Vehicle Components (Z88)

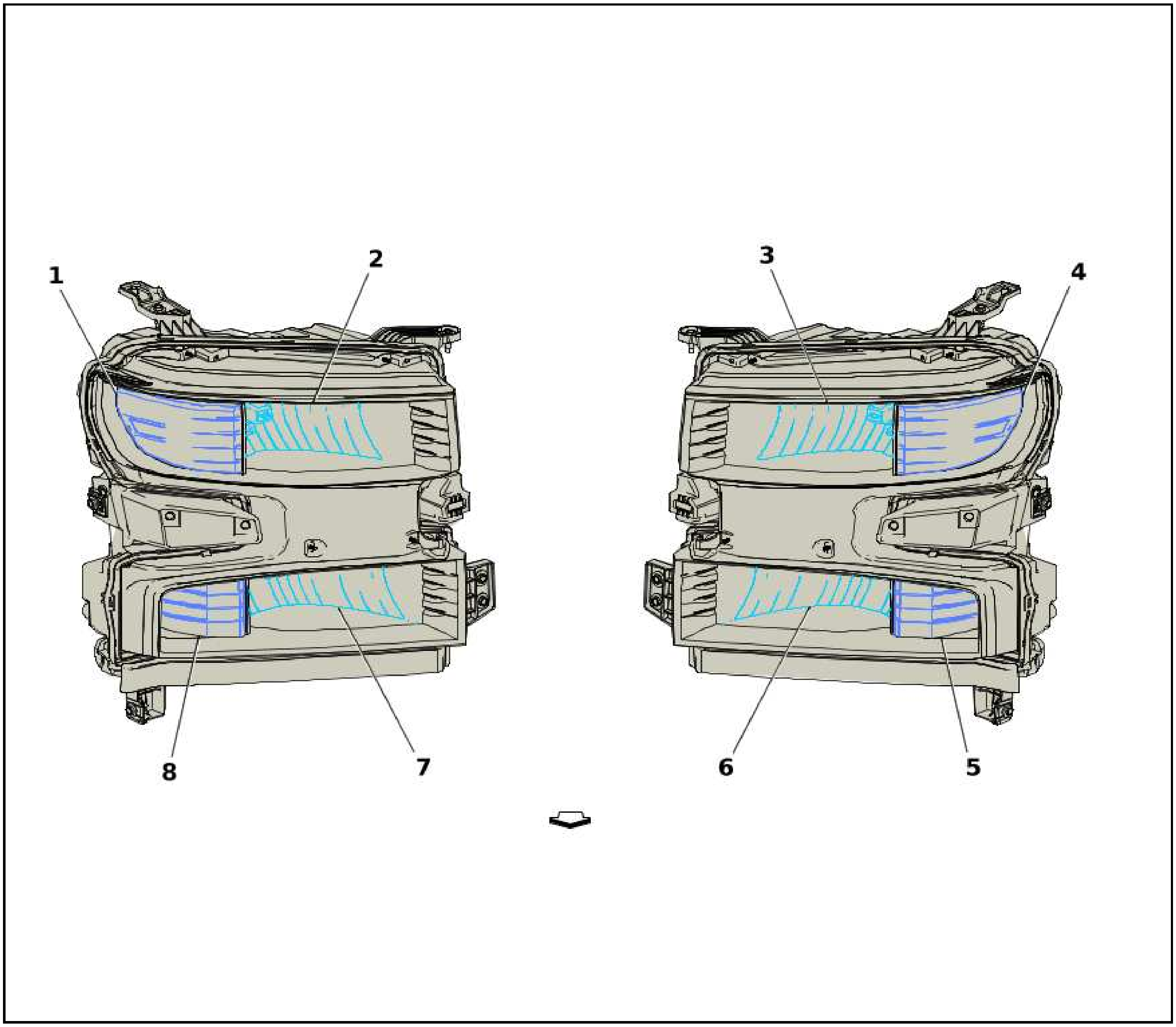


5002846

Items

(1)	A9B Outside Rearview Mirror - Passenger
(2)	T4M Radio Antenna
(3)	T4G Cellular Phone, Navigation, and Digital Radio Antenna
(4)	A9A Outside Rearview Mirror - Driver
(5)	E13LA Headlamp Assembly - Left
(6)	E29LF Fog Lamp - Left Front (S3U/T3U)
(7)	B306A Parking Assist Sensor - Front Left Outer (UD5)
(8)	B306B Parking Assist Sensor - Front Left Middle (UD5)
(9)	B174G Frontview Camera - Grille (UVS)
(10)	B306C Parking Assist Sensor - Front Right Middle (UD5)
(11)	B306D Parking Assist Sensor - Front Right Outer (UD5)
(12)	E29RF Fog Lamp - Right Front (S3U/T3U)
(13)	E13RA Headlamp Assembly - Right

Headlamps - Base Level (X88)

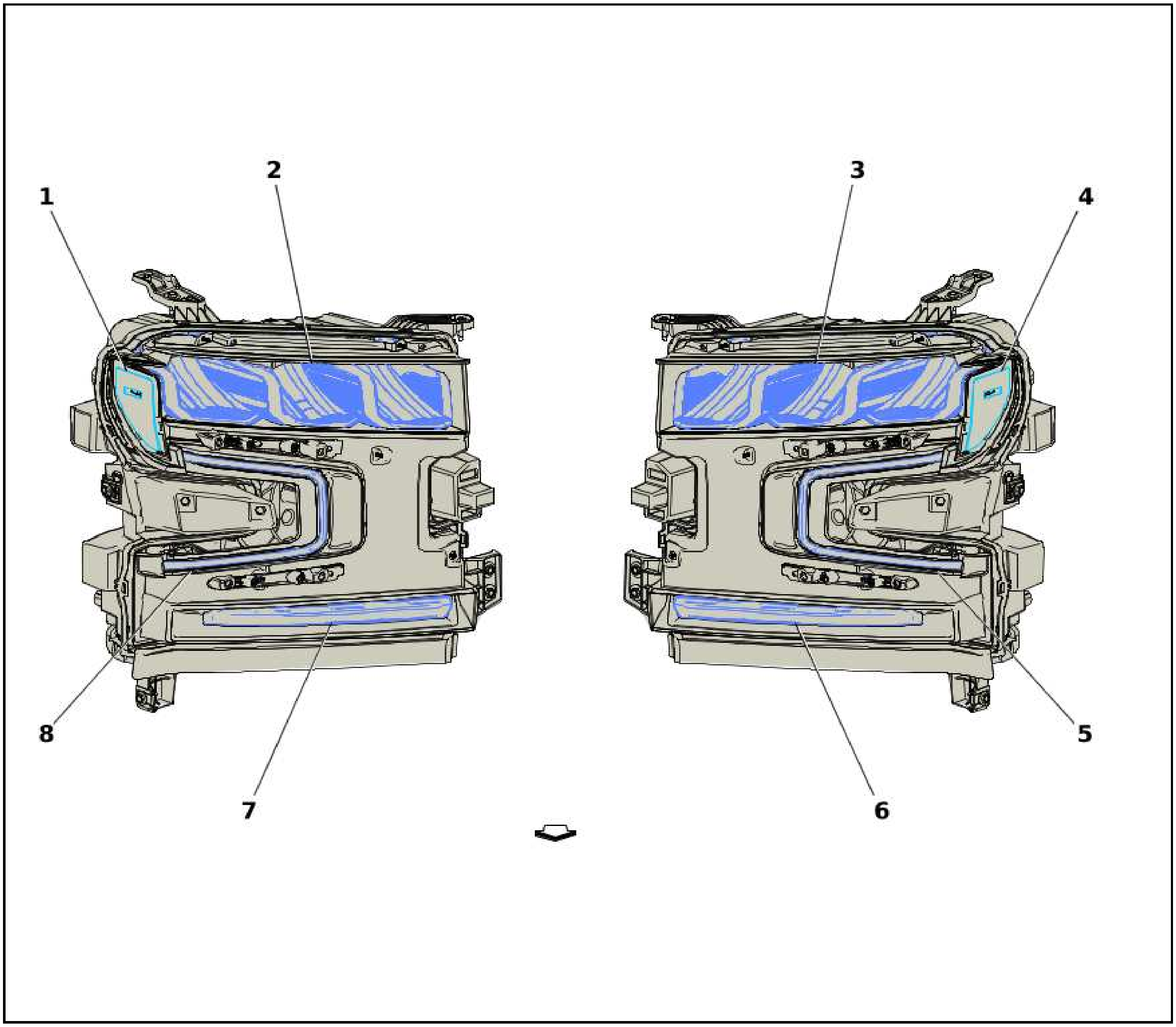


5124974

Items

(1)	E2RF Side Marker Lamp - Right Front
(2)	E4H Headlamp - Right Low Beam (X88 +Base)
(3)	E4G Headlamp - Left Low Beam (X88 +Base)
(4)	E2LF Side Marker Lamp - Left Front
(5)	E4N Park/Turn Signal Lamp - Left (X88 +Base)
(6)	E4E Headlamp - Left High Beam (X88 +Base)
(7)	E4F Headlamp - Right High Beam (X88 +Base)
(8)	E4P Park/Turn Signal Lamp - Right (X88 +Base)

Headlamps - Mid Level (X88)



5124975

Items

(1) E2RF Side Marker Lamp - Right Front

(2) E13R Headlamp - Right

(3) E13L Headlamp - Left

(4) E2LF Side Marker Lamp - Left Front

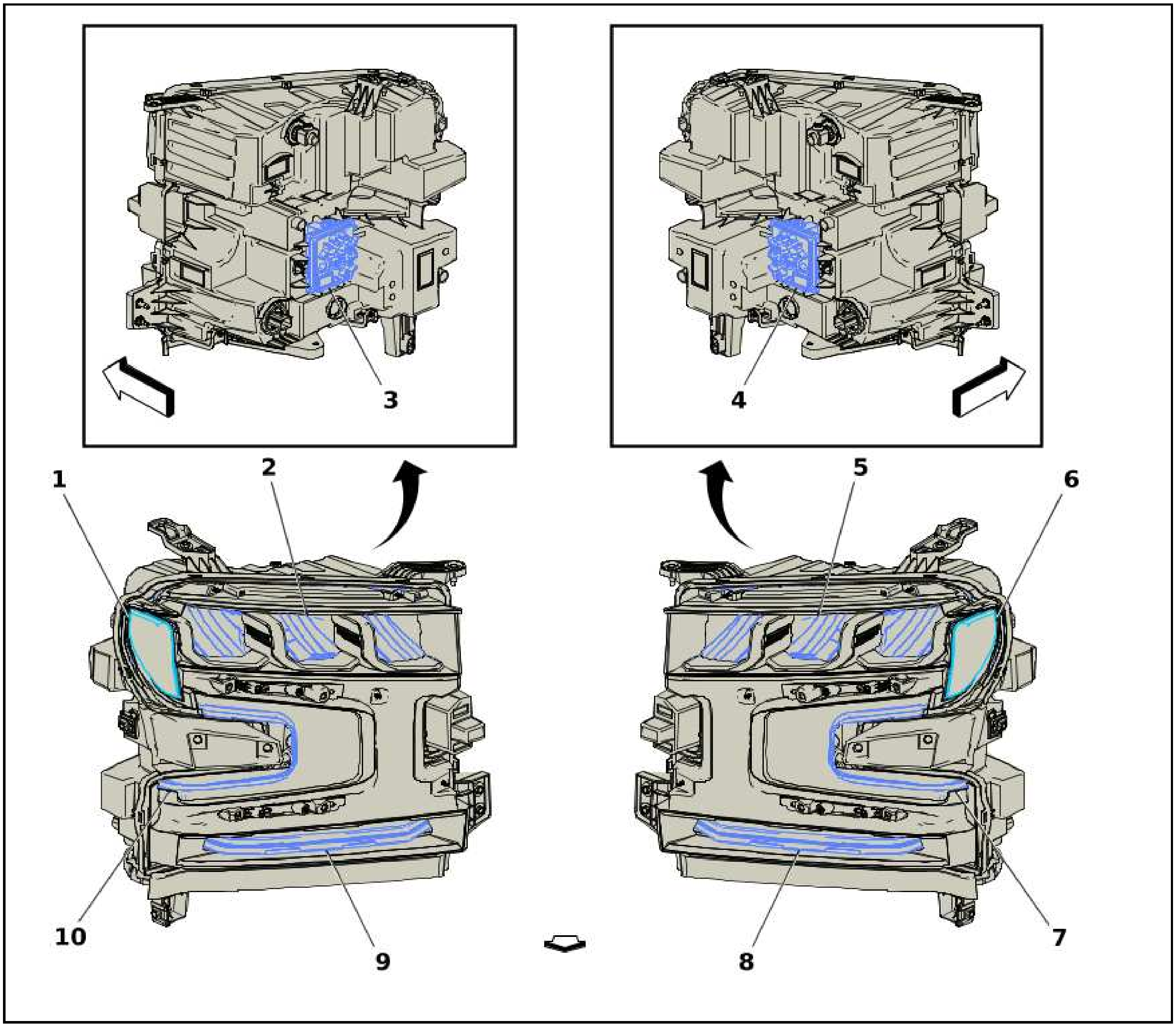
(5) E4C Daytime Running Lamp - Left

(6) E4LF Turn Signal Lamp - Left Front

(7) E4RF Turn Signal Lamp - Right Front

(8) E4D Daytime Running Lamp - Right

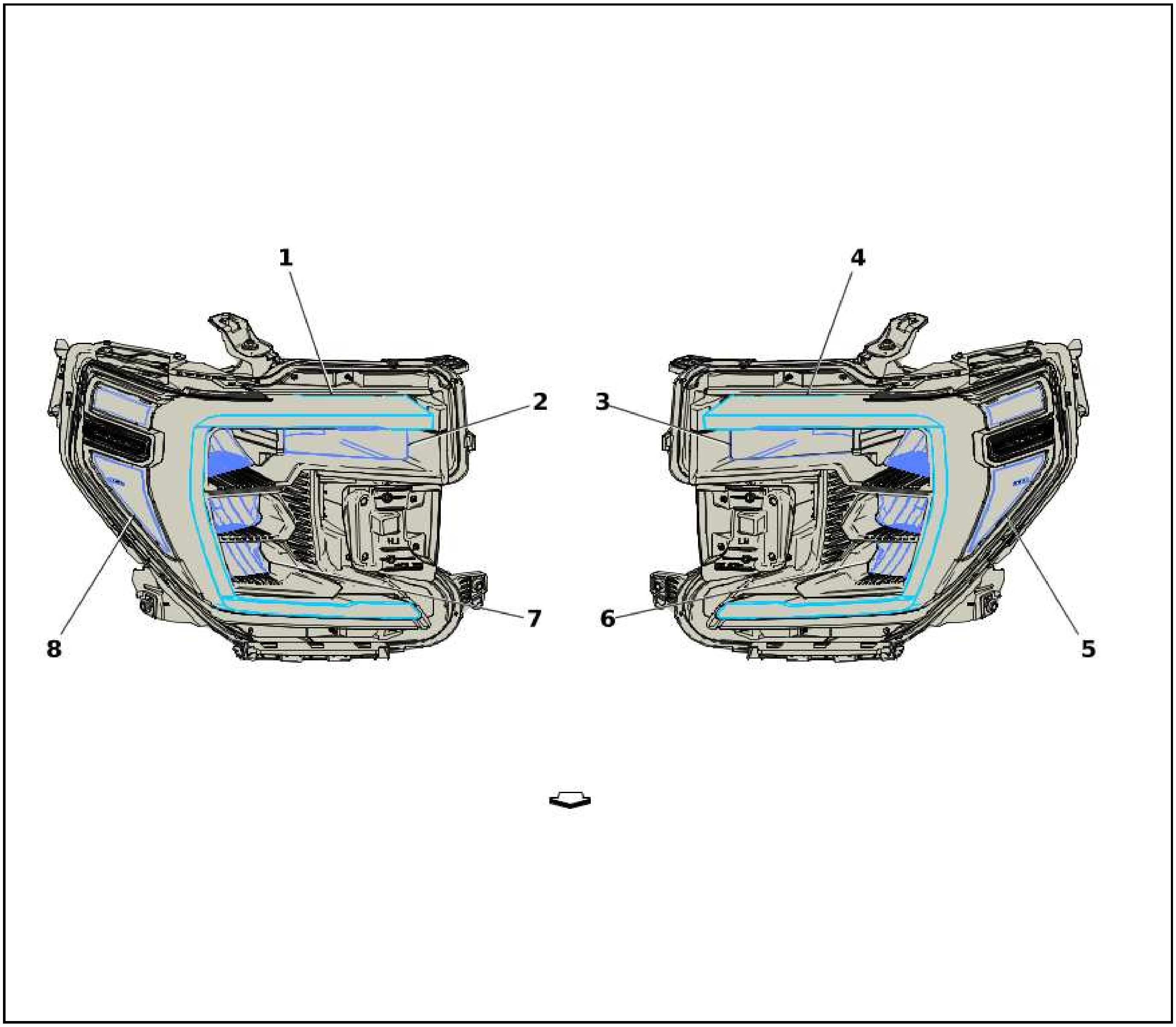
Headlamps - Up Level (X88)



Items

(1)	E2RF Side Marker Lamp - Right Front
(2)	E13R Headlamp - Right
(3)	K166R Multifunction LED Control Module - Right Headlamp
(4)	K166L Multifunction LED Control Module - Left Headlamp
(5)	E13L Headlamp - Left
(6)	E2LF Side Marker Lamp - Left Front
(7)	E4C Daytime Running Lamp - Left
(8)	E4LF Turn Signal Lamp - Left Front
(9)	E4RF Turn Signal Lamp - Right Front
(10)	E4D Daytime Running Lamp - Right

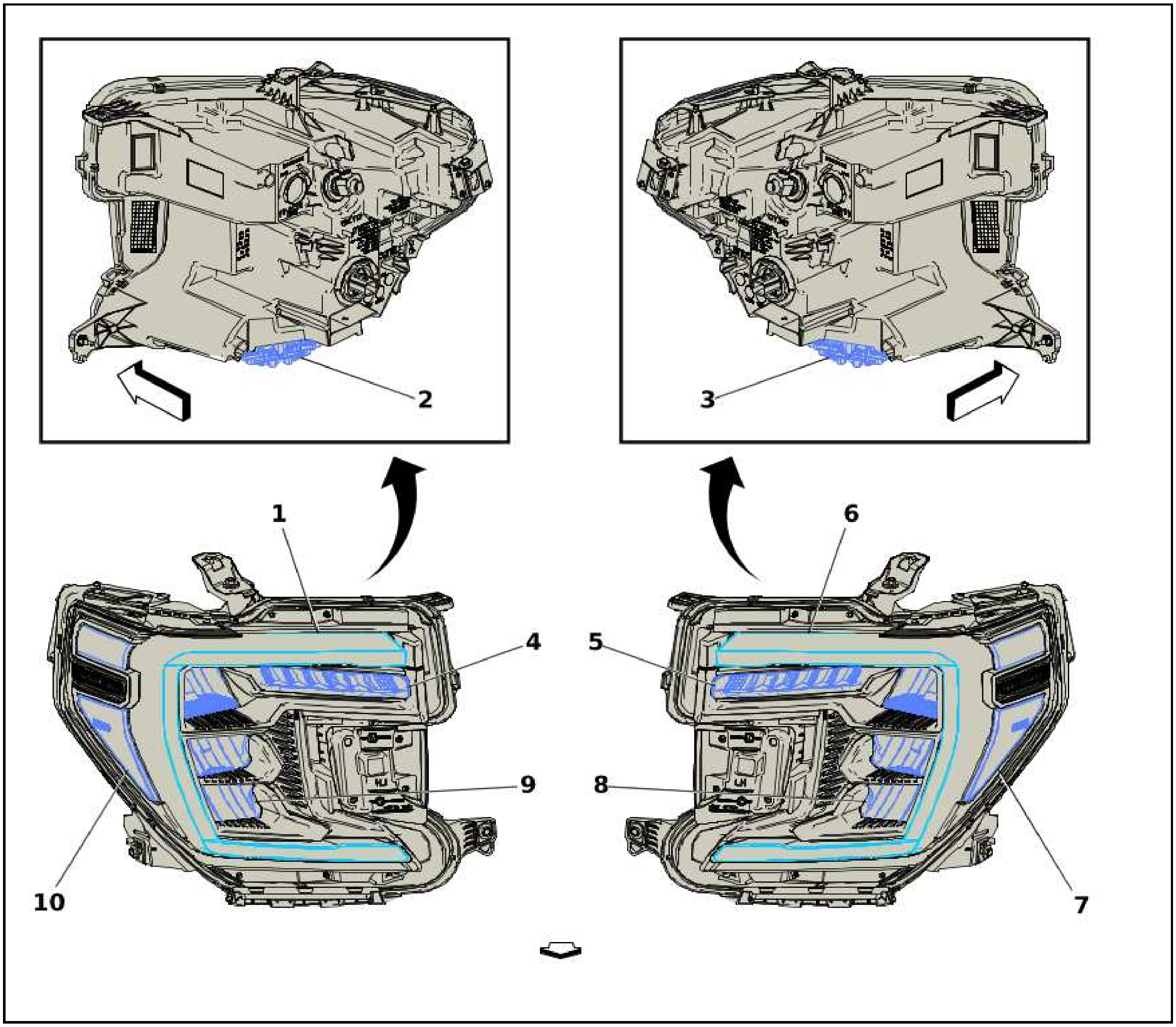
Headlamps - Base Level (Z88)



Items

(1)	E4D Daytime Running Lamp - Right
(2)	E4RF Turn Signal Lamp - Right Front
(3)	E4LF Turn Signal Lamp - Left Front
(4)	E4C Daytime Running Lamp - Left
(5)	E2LF Side Marker Lamp - Left Front
(6)	E13L Headlamp - Left
(7)	E13R Headlamp - Right
(8)	E2RF Side Marker Lamp - Right Front

Headlamps - Up Level (Z88)

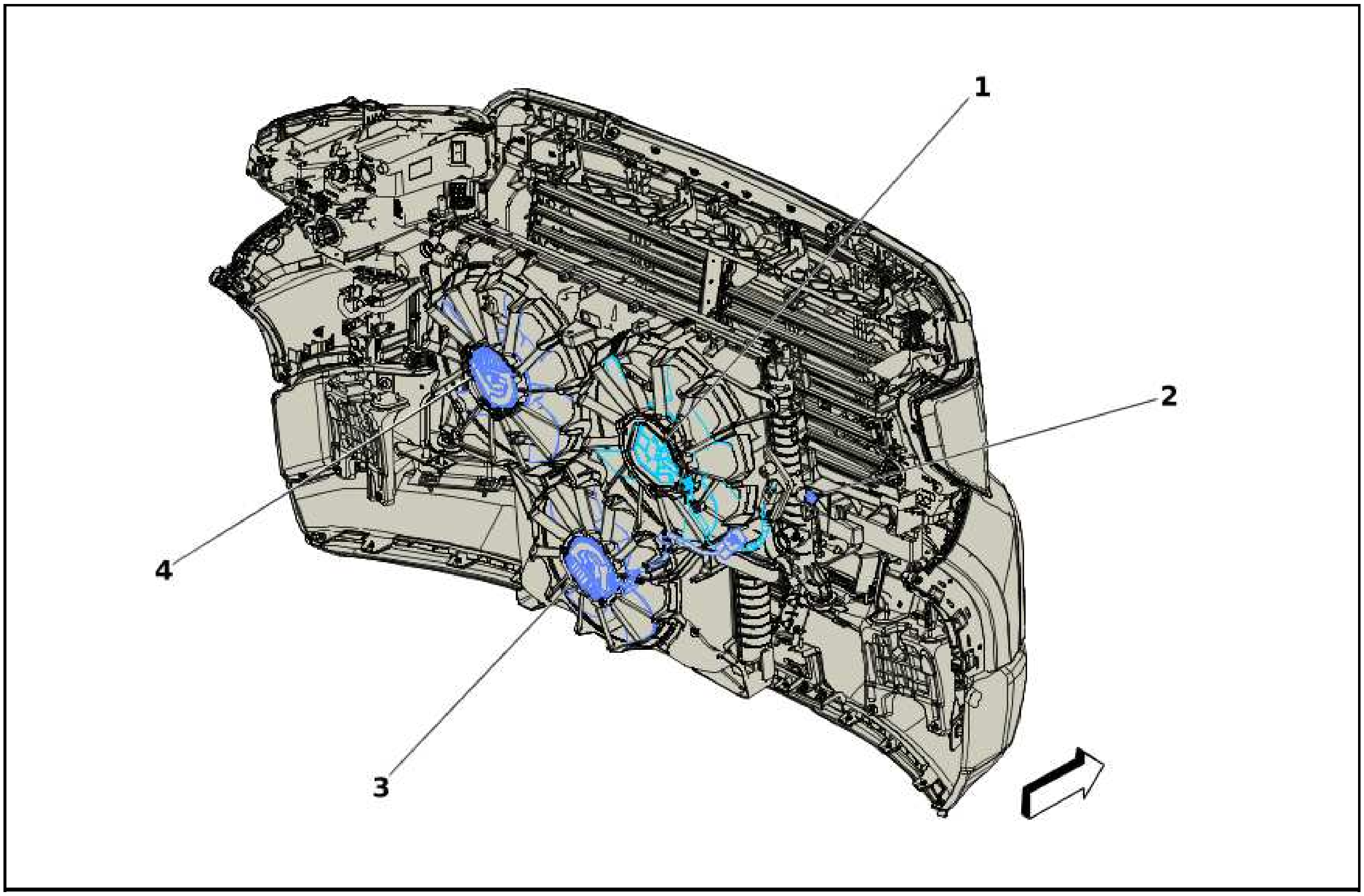


5124978

Items

(1)	E4D Daytime Running Lamp - Right
(2)	K166R Multifunction LED Control Module - Right Headlamp
(3)	K166L Multifunction LED Control Module - Left Headlamp
(4)	E4RF Turn Signal Lamp - Right Front
(5)	E4LF Turn Signal Lamp - Left Front
(6)	E4C Daytime Running Lamp - Left
(7)	E2LF Side Marker Lamp - Left Front
(8)	E13L Headlamp - Left
(9)	E13R Headlamp - Right
(10)	E2RF Side Marker Lamp - Right Front

Radiator Support Components (LM2)

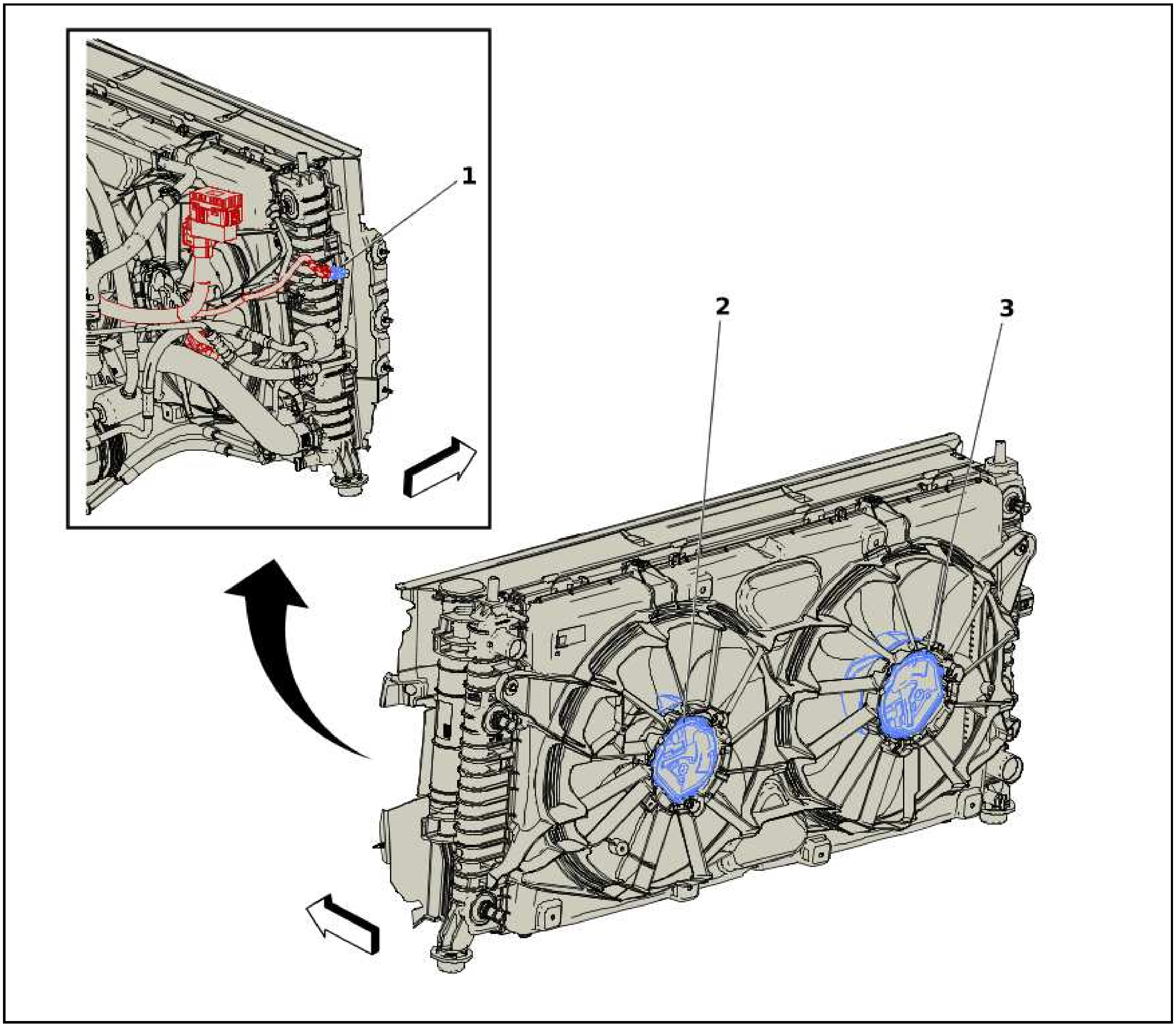


5034210

Items

(1)	G10R Cooling Fan Motor - Right
(2)	B203 Radiator Coolant Temperature Sensor (L3B/LM2)
(3)	G10LW Cooling Fan Motor - Lower (LM2/ L3B)
(4)	G10L Cooling Fan Motor - Left

Radiator Support Components (LV3)

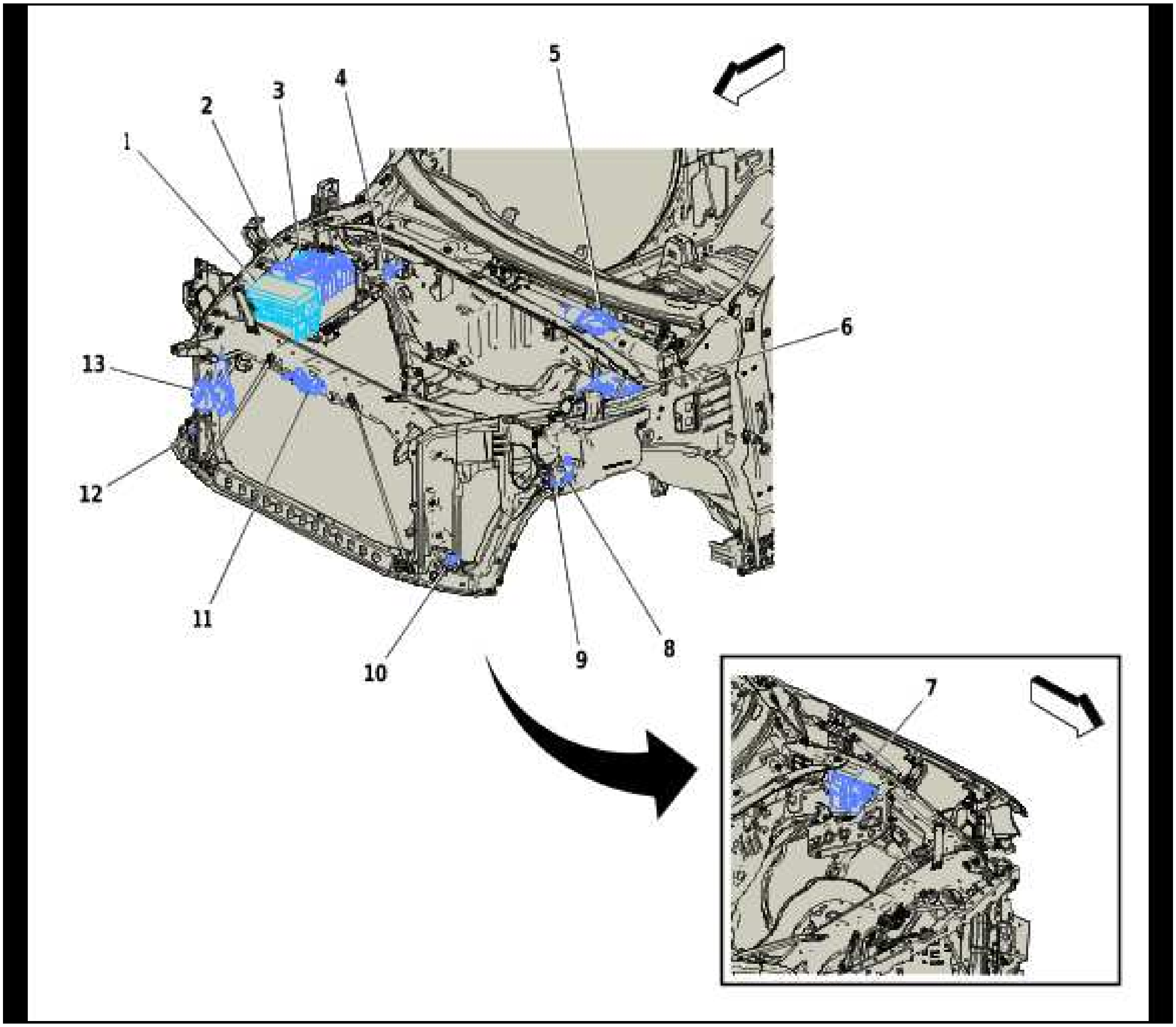


5002847

Items

(1)	B1 A/C Refrigerant Pressure Sensor
(2)	G10L Cooling Fan Motor - Left
(3)	G10R Cooling Fan Motor - Right

Engine Compartment Components - Top



5002848

Items

(1) X50A Fuse Block - Underhood

(2) X50D Fuse Block - Battery

(3) B110 Battery Sensor Module (KL9)

(4) B18 Battery Current Sensor (-KL9)

(5) M75 Windshield Wiper Motor

(6) K160 Brake System Control Module

(7) K69 Transfer Case Control Module (NP0/ NQH)

(8) G24 Windshield Washer Pump

(9) B118B Windshield Washer Fluid Level Switch

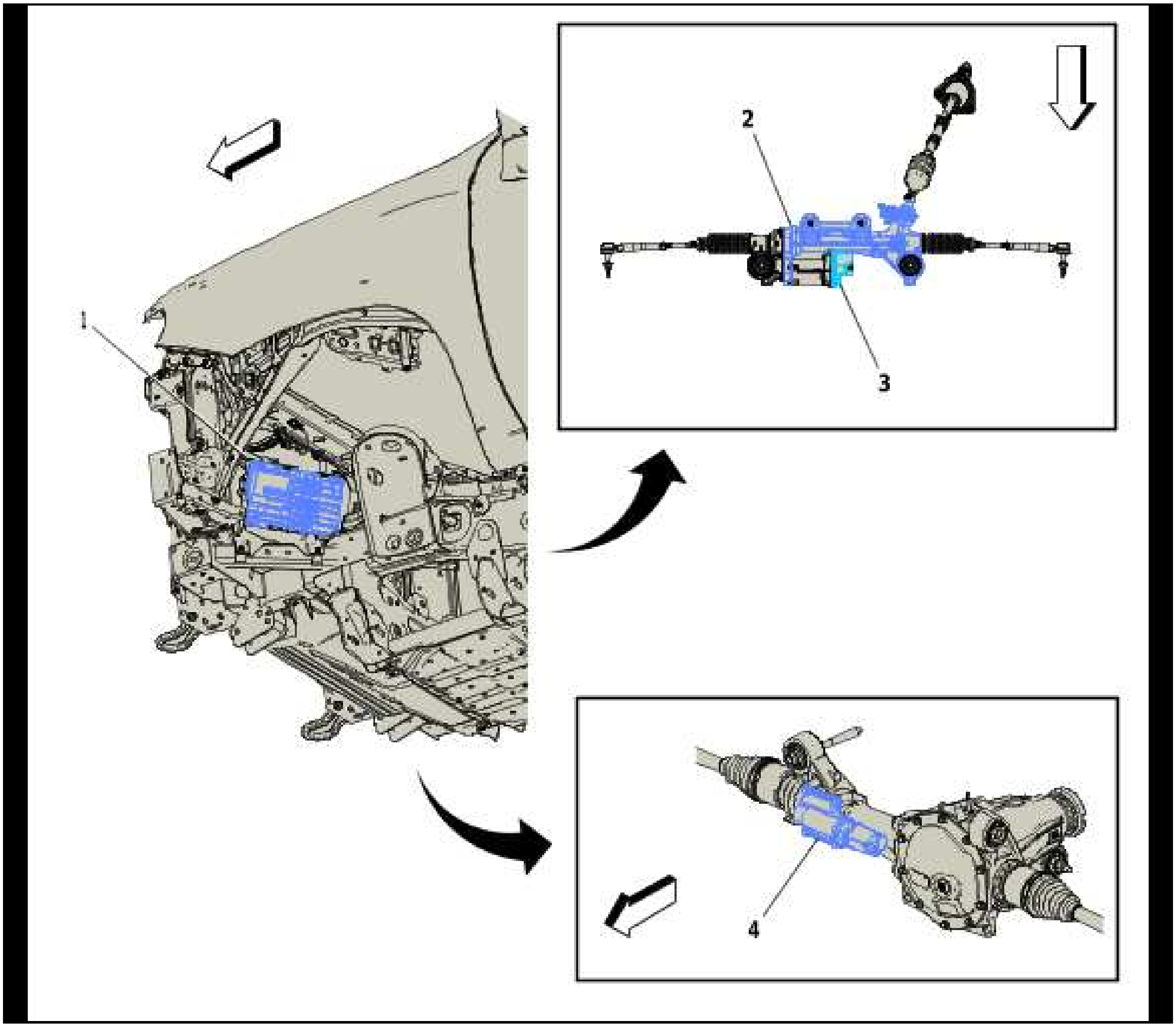
(10) B59L Front Impact Sensor - Left

(11) B55 Engine Hood Switch

(12) B59R Front Impact Sensor - Right

(13) P12 Horn

Engine Compartment Components - Bottom

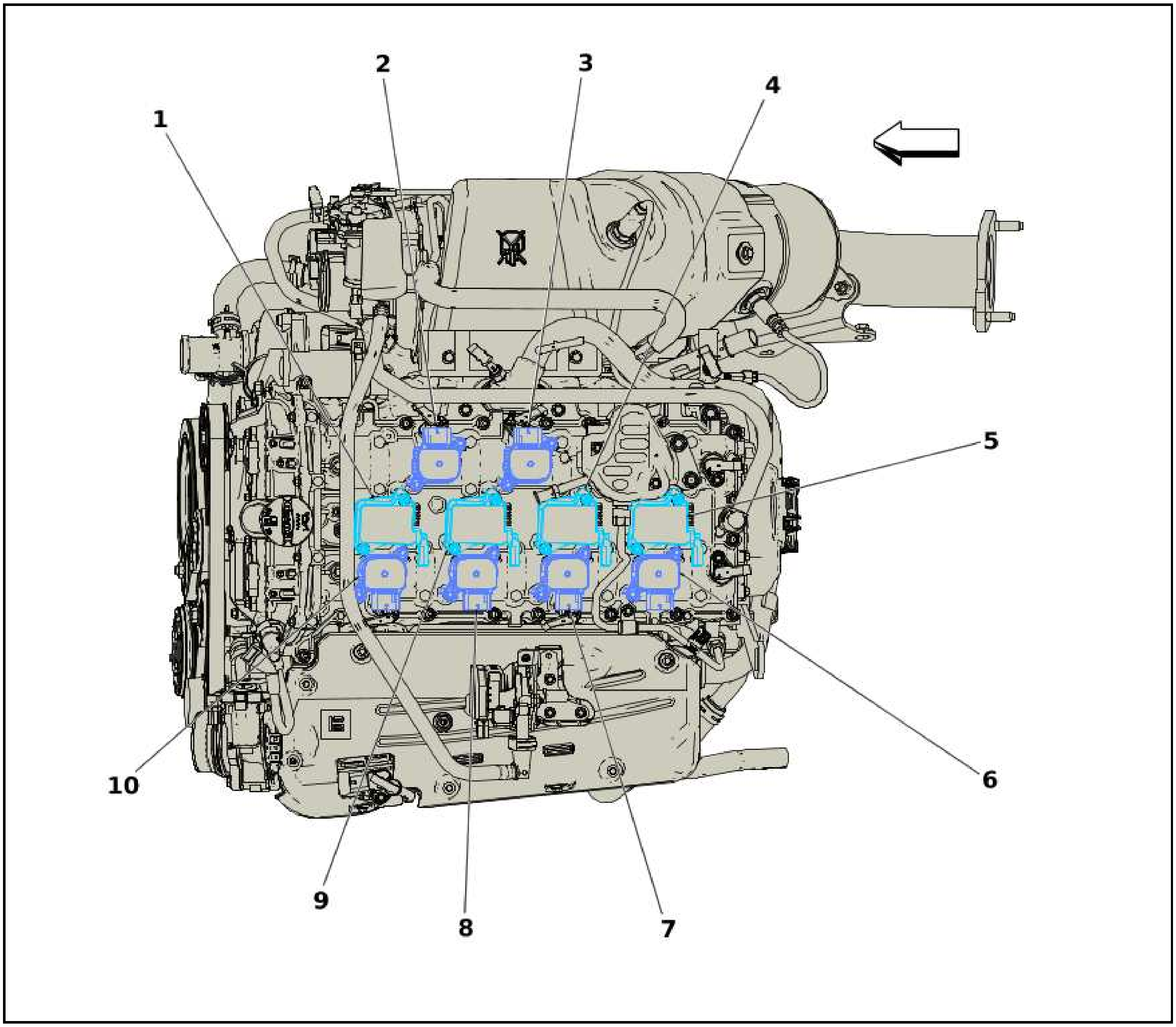


Items

(1)	K20 Engine Control Module
(2)	B137B Power Steering Shaft Torque/Position Sensor
(3)	K43 Power Steering Control Module
(4)	M26 Front Axle Engagement Actuator (NP0/ NQH)

Powertrain Component Views

Engine Components - Top (L3B)



5034738

Items

(1) T8A Ignition Coil 1 (L3B/L82/L84/L87/LV3)

(2) M130B Exhaust Camshaft Profile Actuator 2 (L3B)

(3) M130C Exhaust Camshaft Profile Actuator 3 (L3B)

(4) T8C Ignition Coil 3 (L3B/L82/L84/L87/LV3)

(5) T8D Ignition Coil 4 (L3B/L82/L84/L87/LV3)

(6) M129D Intake Camshaft Profile Actuator 4 (L3B)

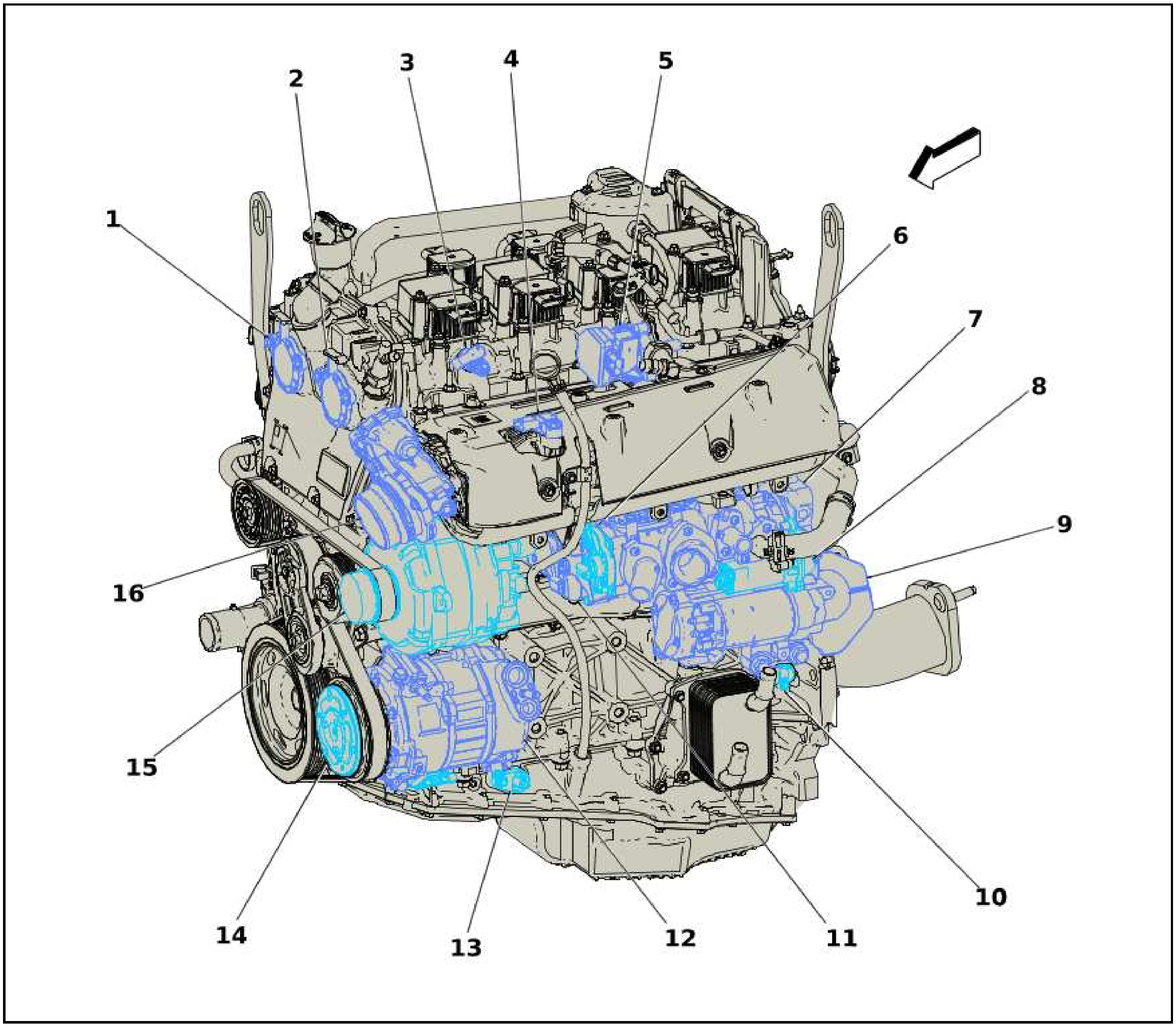
(7) M129C Intake Camshaft Profile Actuator 3 (L3B)

(8) M129B Intake Camshaft Profile Actuator 2 (L3B)

(9) T8B Ignition Coil 2 (L3B/L82/L84/L87/LV3)

(10) M129A Intake Camshaft Profile Actuator 1 (L3B)

Engine Components - Left Front (L3B)



5034739

Items

(1) Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)

(2) Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)

(3) B338A Intake Camshaft Profile Sleeve Position Sensor 1 (L3B)

(4) B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)

(5) G58 Evaporative Emission Purge Pump (L3B)

(6) B34A Engine Coolant Temperature Sensor 1 (L3B/LM2)

(7) Q97 Engine Coolant Flow Control Valve (L3B)

(8) Q74 Engine Coolant Bypass Valve (L3B/LM2)

(9) M64 Starter Motor

(10) B26 Crankshaft Position Sensor

(11) Q97B Engine Coolant Flow Control Valve - Block (LM2)

(12) Q2 A/C Compressor Clutch

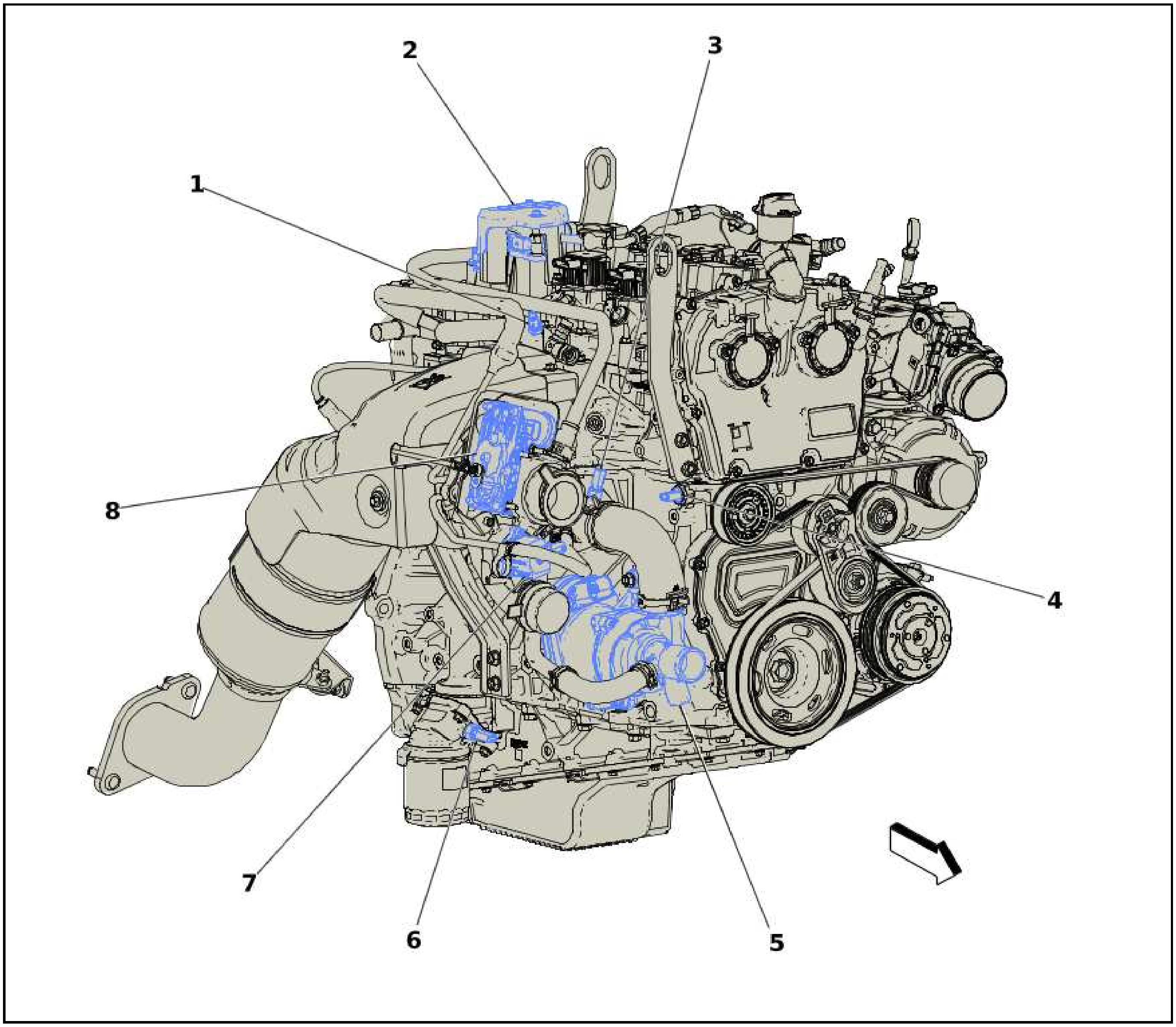
(13) Q80L Engine Mount Solenoid Valve - Left (L3B/LM2)

(14) Q46 A/C Compressor Solenoid Valve

(15) G13 Generator

(16) Q38 Throttle Body (-LM2)

Engine Components - Right Front (L3B)

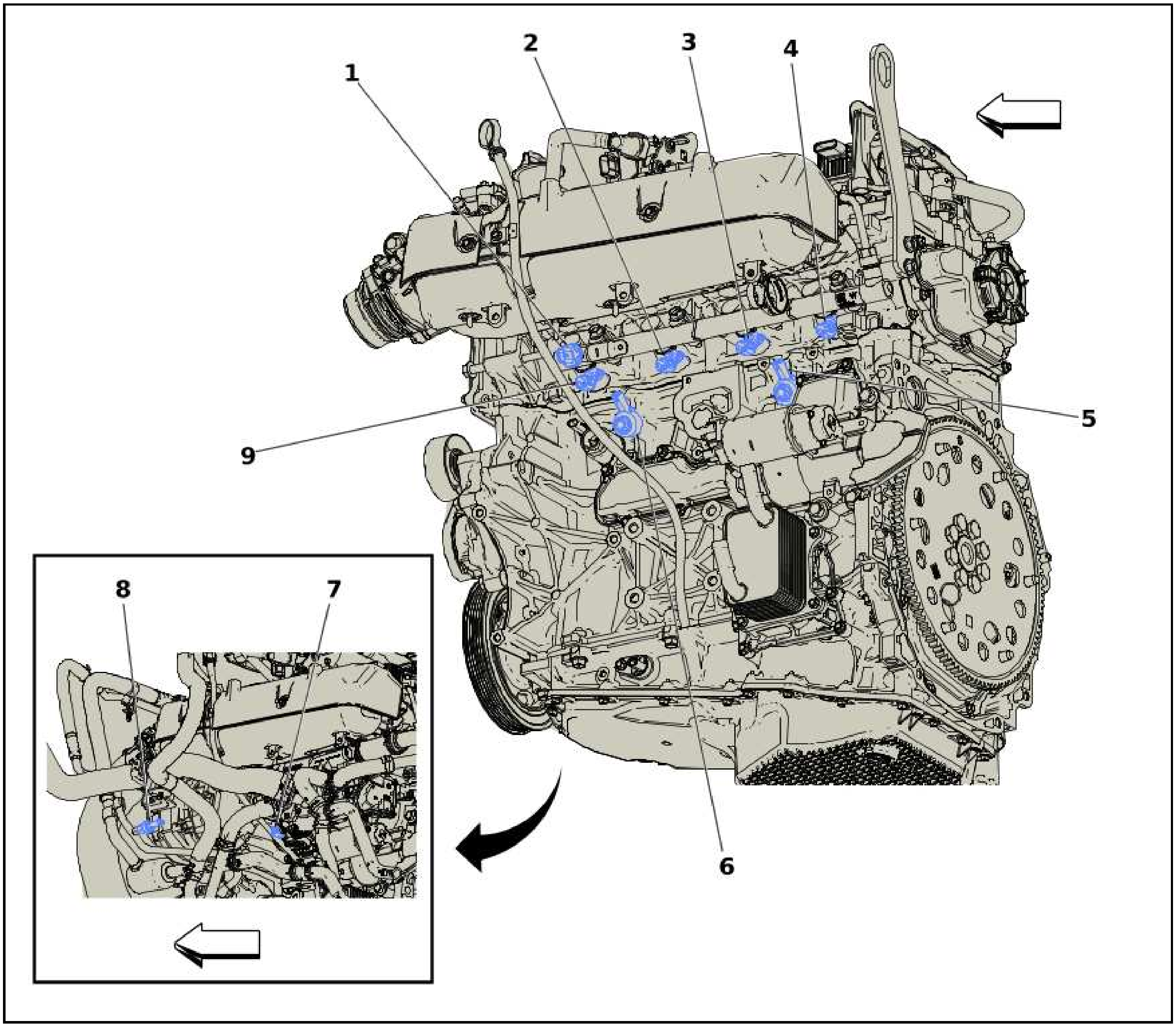


5034740

Items

(1)	B34E Engine Coolant Temperature Sensor 5 (L3B/LM2)
(2)	G18 High Pressure Fuel Pump
(3)	B34B Engine Coolant Temperature Sensor 2 (L3B/LM2)
(4)	B37B Engine Oil Pressure Sensor
(5)	G59 Engine Coolant Pump (L3B)
(6)	B36 Engine Oil Temperature Sensor (L3B/LM2)
(7)	Q40 Turbocharger Bypass Solenoid Valve (L3B)
(8)	M128 Turbocharger Wastegate Actuator (L3B)

Engine Components - Left Rear (L3B)



5034741

Items

(1) B310 Fuel Pressure/Temperature Sensor (L3B/L82/L84/L87/LV3)

(2) Q17B Fuel Injector 2

(3) Q17C Fuel Injector 3

(4) Q17D Fuel Injector 4

(5) B68B Knock Sensor 2 (L3B/L82/L84/L87/LV3)

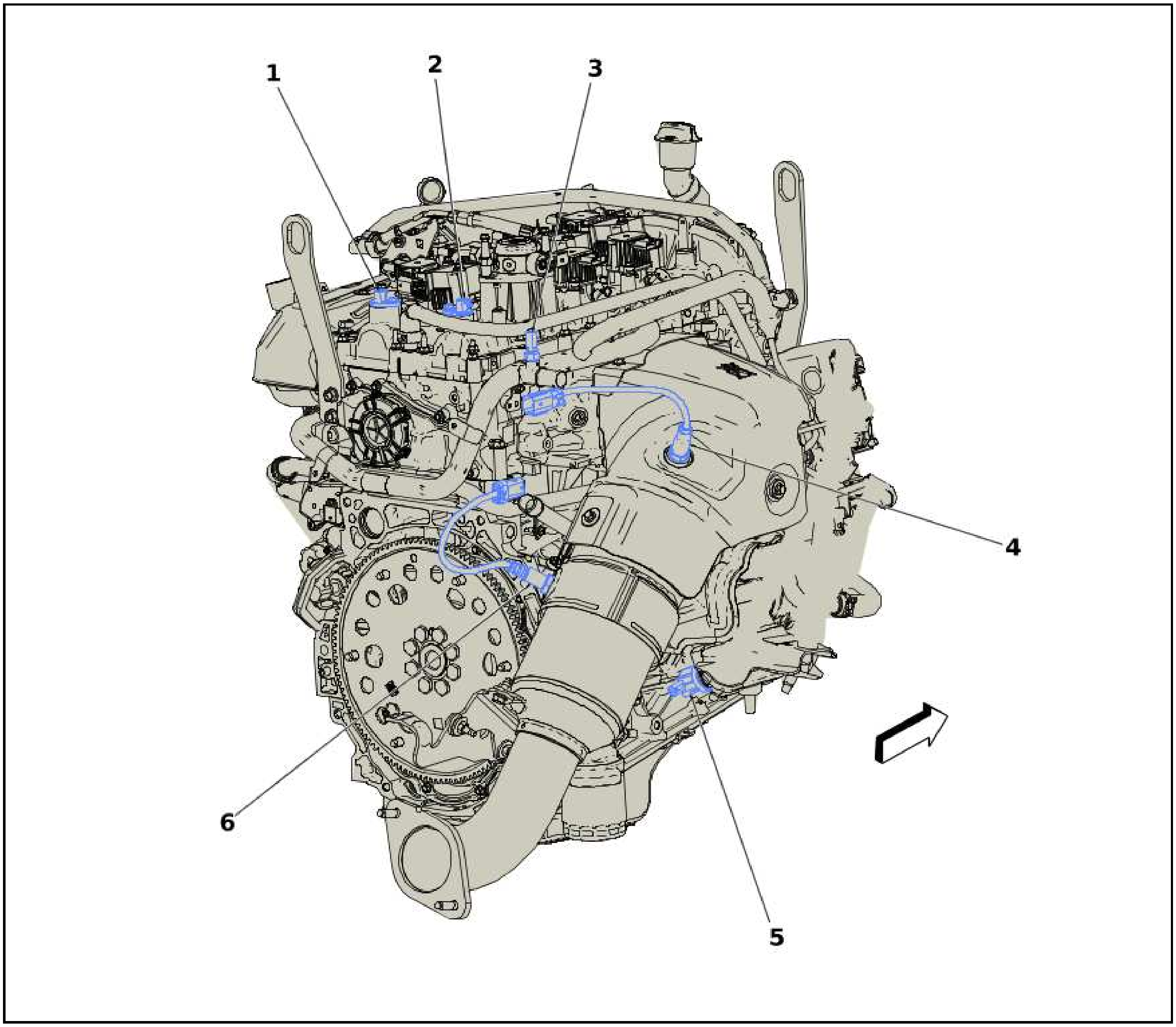
(6) B68A Knock Sensor 1 (L3B/L82/L84/L87/LV3)

(7) B34F Engine Coolant Temperature Sensor 6 (L3B)

(8) B1 A/C Refrigerant Pressure Sensor

(9) Q17A Fuel Injector 1

Engine Components - Right Rear (L3B)

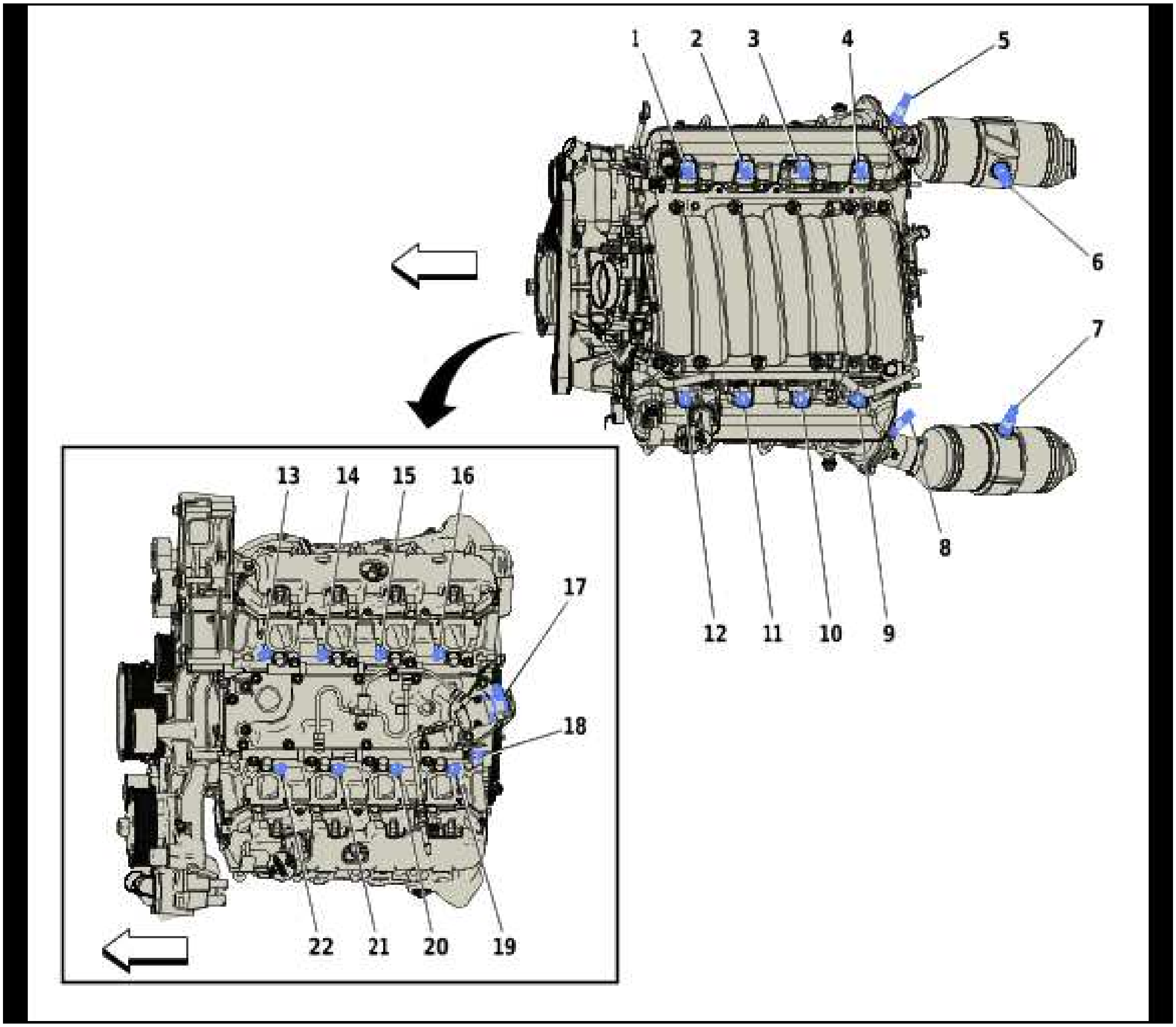


5034742

Items

(1)	B23F Camshaft Position Sensor - Intake (L3B)
(2)	B23E Camshaft Position Sensor - Exhaust (L3B)
(3)	B34C Engine Coolant Temperature Sensor 3 (L3B/LM2)
(4)	B52A Heated Oxygen Sensor 1 (L3B)
(5)	Q80R Engine Mount Solenoid Valve - Right (L3B/LM2)
(6)	B52B Heated Oxygen Sensor 2 (L3B)

Engine Components - Top (L82/L84/L87)

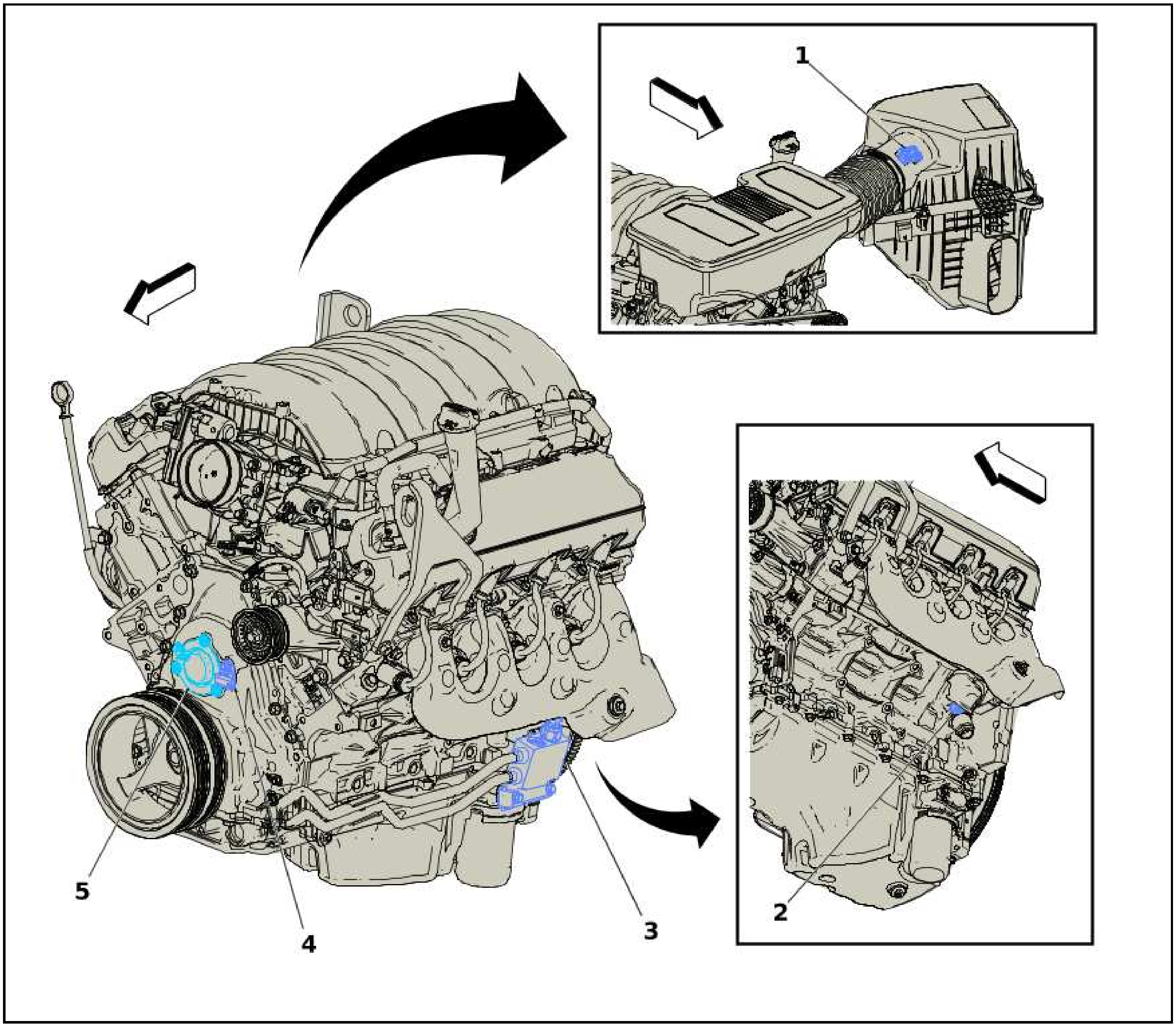


5034211

Items

(1)	T8B Ignition Coil 2 (L3B/L82/L84/L87/LV3)
(2)	T8D Ignition Coil 4 (L3B/L82/L84/L87/LV3)
(3)	T8F Ignition Coil 6 (L82/L84/L87/LV3)
(4)	T8H Ignition Coil 8 (L82/L84/L87)
(5)	B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3)
(6)	B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87/LV3)
(7)	B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87/LV3)
(8)	B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3)
(9)	T8G Ignition Coil 7 (L82/L84/L87)
(10)	T8E Ignition Coil 5 (L82/L84/L87/LV3)
(11)	T8C Ignition Coil 3 (L3B/L82/L84/L87/LV3)
(12)	T8A Ignition Coil 1 (L3B/L82/L84/L87/LV3)
(13)	Q17C Fuel Injector 3
(14)	Q17D Fuel Injector 4
(15)	Q17F Fuel Injector 6 (L82/L84/L87/LM2/LV3)
(16)	Q17H Fuel Injector 8 (L82/L84/L87)
(17)	G18 High Pressure Fuel Pump
(18)	B310 Fuel Pressure/Temperature Sensor (L3B/L82/L84/L87/LV3)
(19)	Q17G Fuel Injector 7 (L82/L84/L87)
(20)	Q17E Fuel Injector 5 (L82/L84/L87/LM2/LV3)
(21)	Q17C Fuel Injector 3
(22)	Q17A Fuel Injector 1

Engine Components - Left Front (L82/L84/L87)



Items

(1) B75C Multifunction Intake Air Sensor

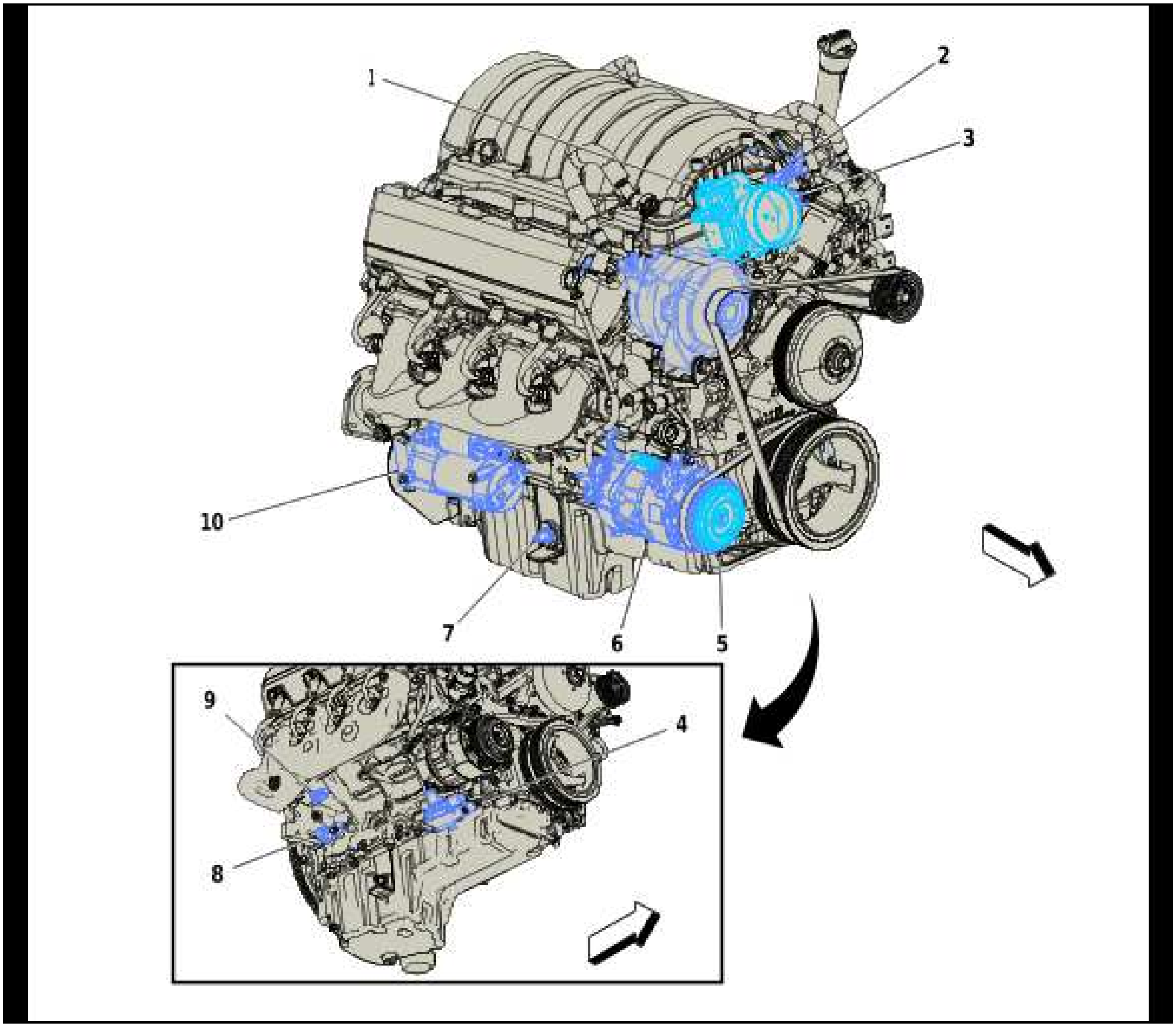
(2) B68A Knock Sensor 1 (L3B/L82/L84/L87/LV3)

(3) B37B Engine Oil Pressure Sensor

(4) B23 Camshaft Position Sensor (L82/L84/L87/LM2/LV3)

(5) Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87/LV3)

Engine Components - Right Front (L82/L84/L87)

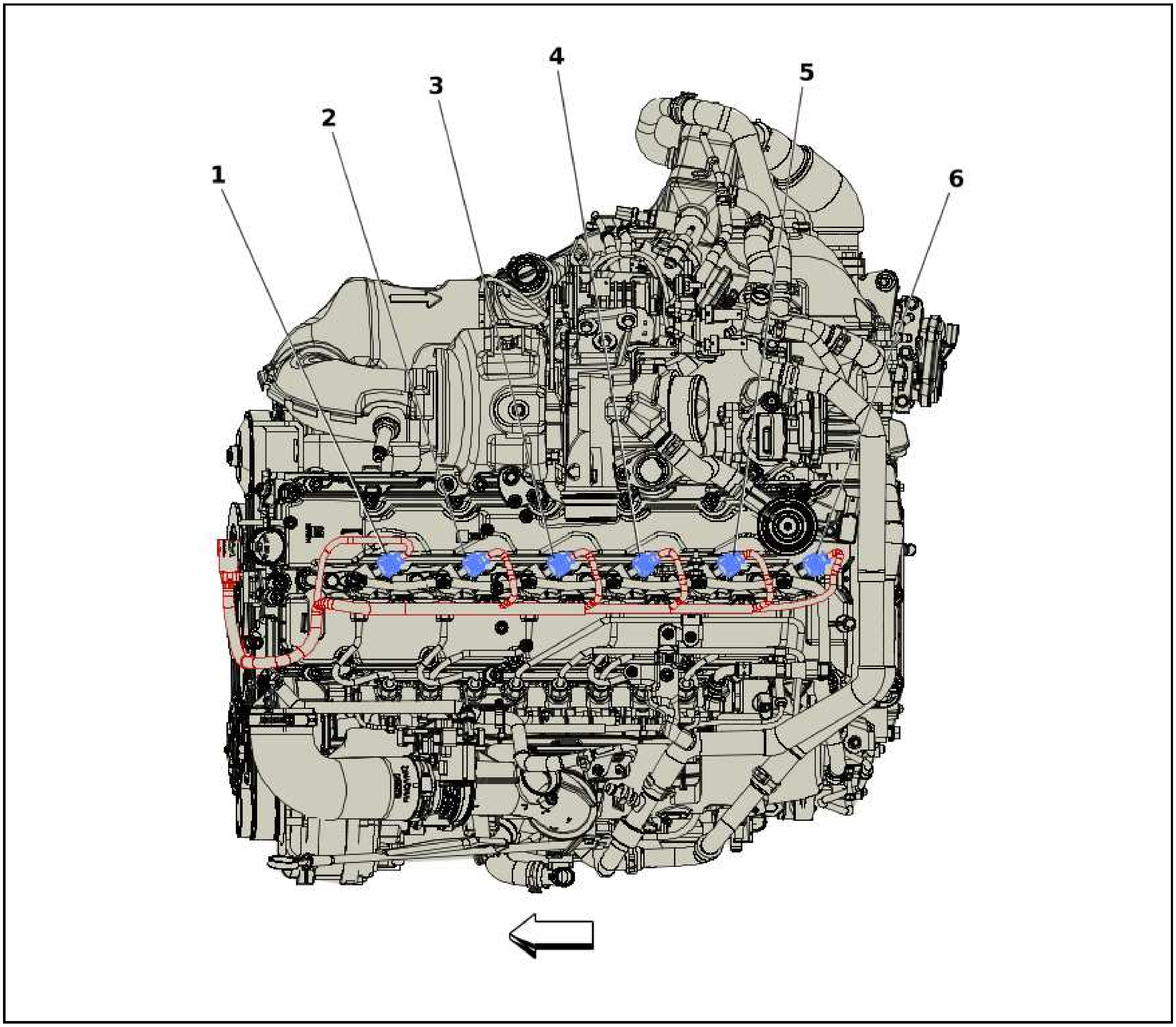


5034744

Items

(1)	Q38 Throttle Body (-LM2)
(2)	B74 Manifold Absolute Pressure Sensor (L82/L84/L87/LV3)
(3)	Q12 Evaporative Emission Purge Solenoid Valve (L3B/L82/L84/L87/LV3)
(4)	G17 Heater Coolant Pump (L84/L87/LM2)
(5)	Q2 A/C Compressor Clutch
(6)	G1 A/C Compressor
(7)	B35 Engine Oil Level Switch (L82/L84/L87/LV3)
(8)	B26 Crankshaft Position Sensor
(9)	B68B Knock Sensor 2 (L3B/L82/L84/L87/LV3)
(10)	M64 Starter Motor

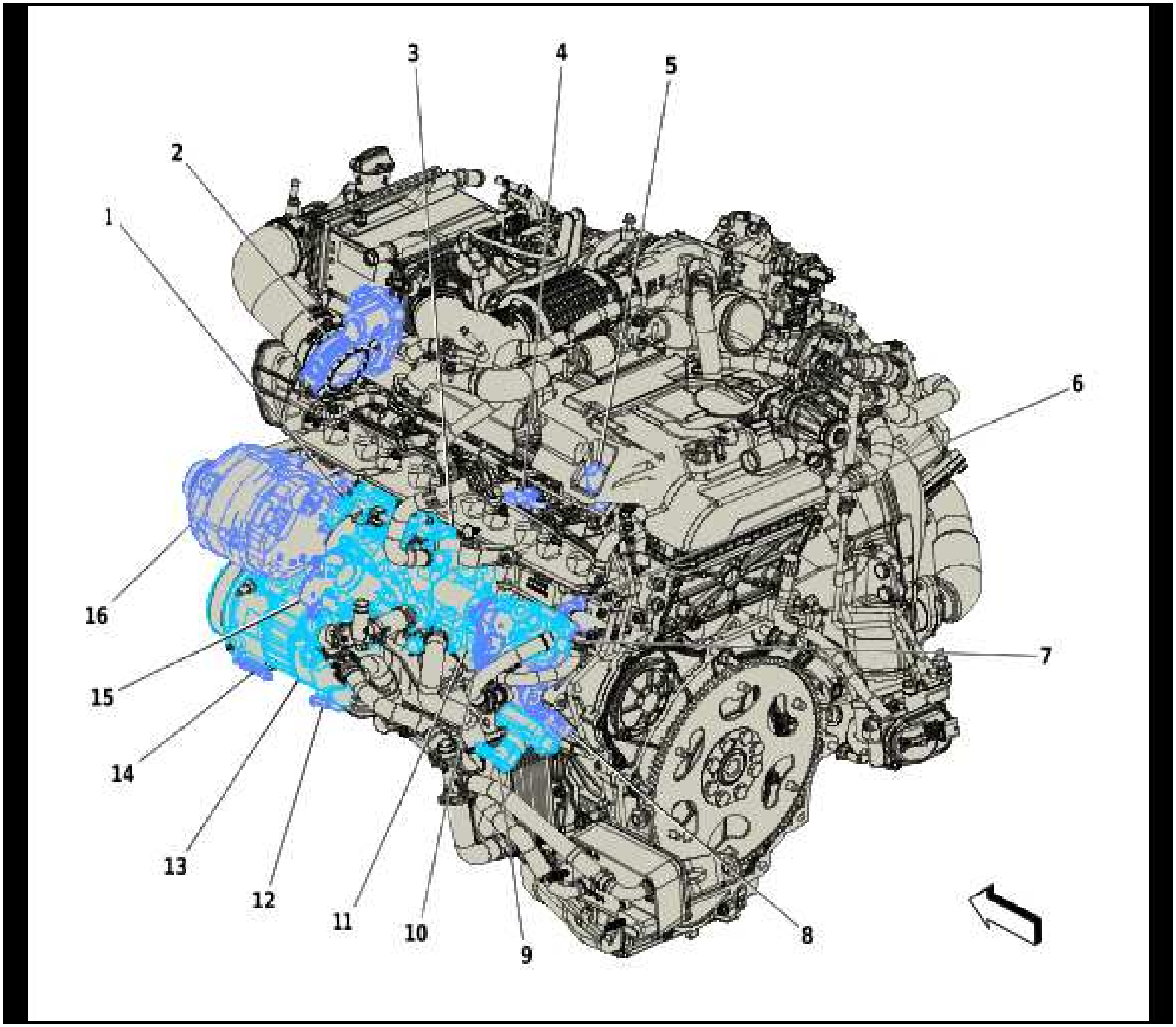
Engine Components - Top (LM2)



Items

- (1) Q17A Fuel Injector 1
- (2) Q17B Fuel Injector 2
- (3) Q17C Fuel Injector 3
- (4) Q17D Fuel Injector 4
- (5) Q17E Fuel Injector 5 (L82/L84/L87/LM2/LV3)
- (6) Q17F Fuel Injector 6 (L82/L84/L87/LM2/LV3)

Engine Components - Left Rear (LM2)

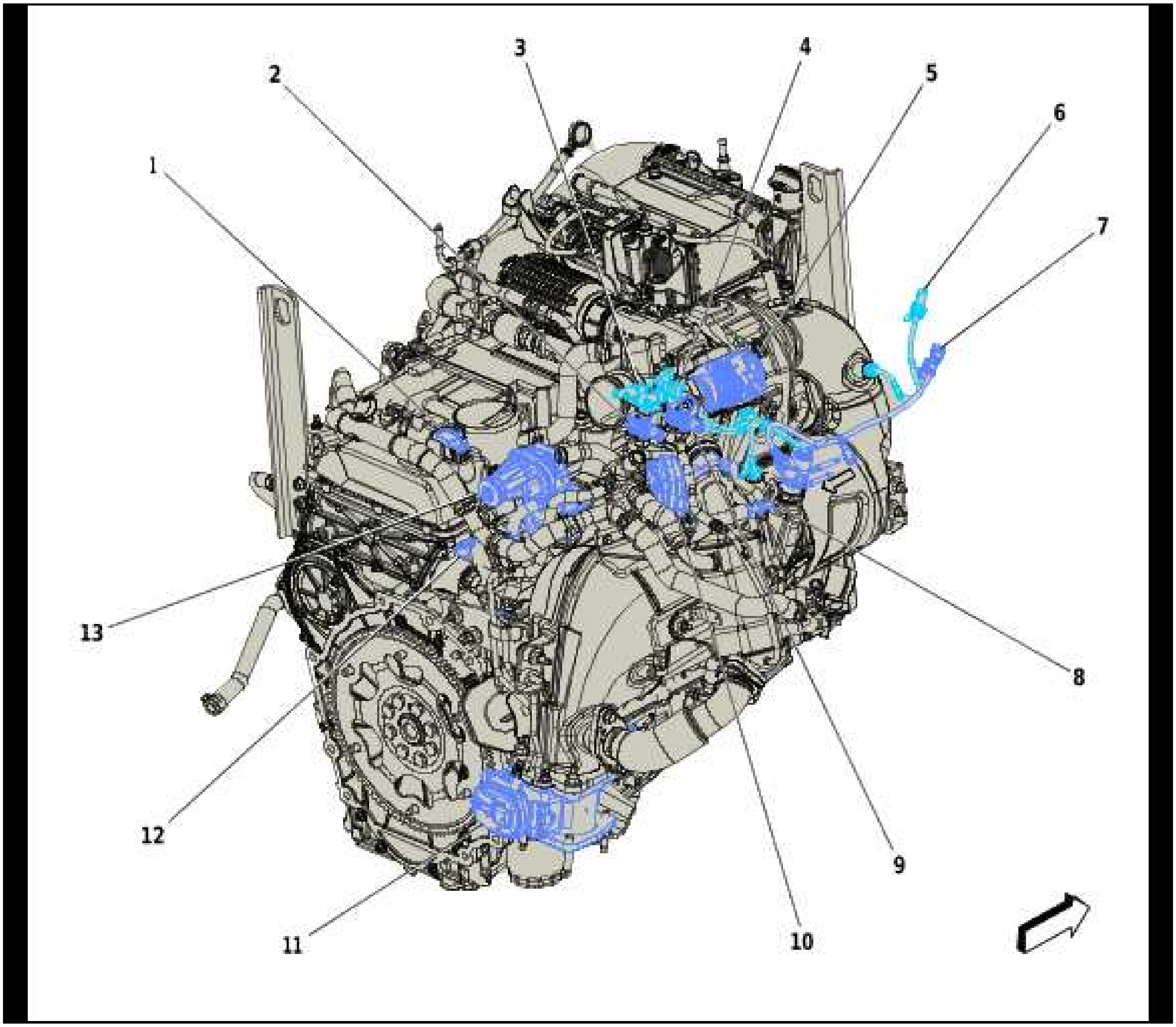


5034213

Items

(1)	Q97B Engine Coolant Flow Control Valve - Block (LM2)
(2)	Q20 Intake Air Flow Valve (LM2)
(3)	B34B Engine Coolant Temperature Sensor 2 (L3B/LM2)
(4)	B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)
(5)	Q18B Fuel Pressure Regulator 2 (LM2)
(6)	B34E Engine Coolant Temperature Sensor 5 (L3B/LM2)
(7)	Q18C Fuel Pressure Regulator 3 (LM2)
(8)	G18 High Pressure Fuel Pump
(9)	Q18A Fuel Pressure Regulator 1 (LM2)
(10)	Q74 Engine Coolant Bypass Valve (L3B/LM2)
(11)	Q97 Engine Coolant Flow Control Valve (L3B)
(12)	Q46 A/C Compressor Solenoid Valve
(13)	G1 A/C Compressor
(14)	Q2 A/C Compressor Clutch
(15)	Q97M Engine Coolant Flow Control Valve - Main (LM2)
(16)	G13 Generator

Engine Components - Right Rear (LM2)



5731555

Items

(1) B321 Crankcase Pressure Sensor (LM2)

(2) B345P Exhaust Pressure Differential Sensor - Particulate Filter

(3) B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)

(4) B131B Exhaust Temperature Sensor 2 (LM2)

(5) M103 Turbocharger Vane Position Actuator (LM2)

(6) B131A Exhaust Temperature Sensor 1 (LM2)

(7) Q61 Reductant Injector (LM2)

(8) B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)

(9) B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)

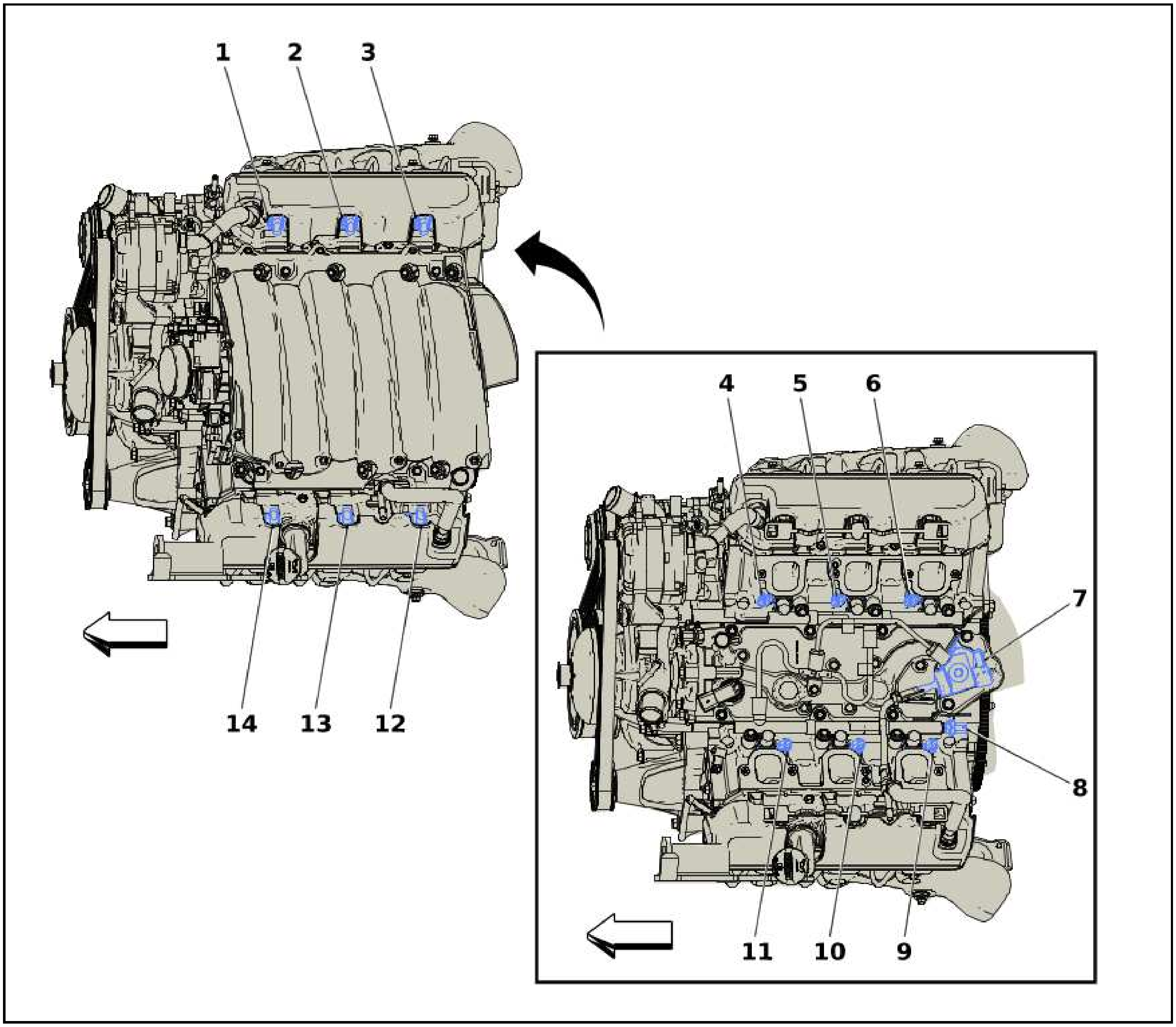
(10) Q14B Exhaust Gas Recirculation Valve 2 (LM2)

(11) M122 Exhaust Pressure Control Valve Actuator (LM2)

(12) B23E Camshaft Position Sensor - Exhaust (L3B)

(13) Q14A Exhaust Gas Recirculation Valve 1 (LM2)

Engine Components - Top (LV3)

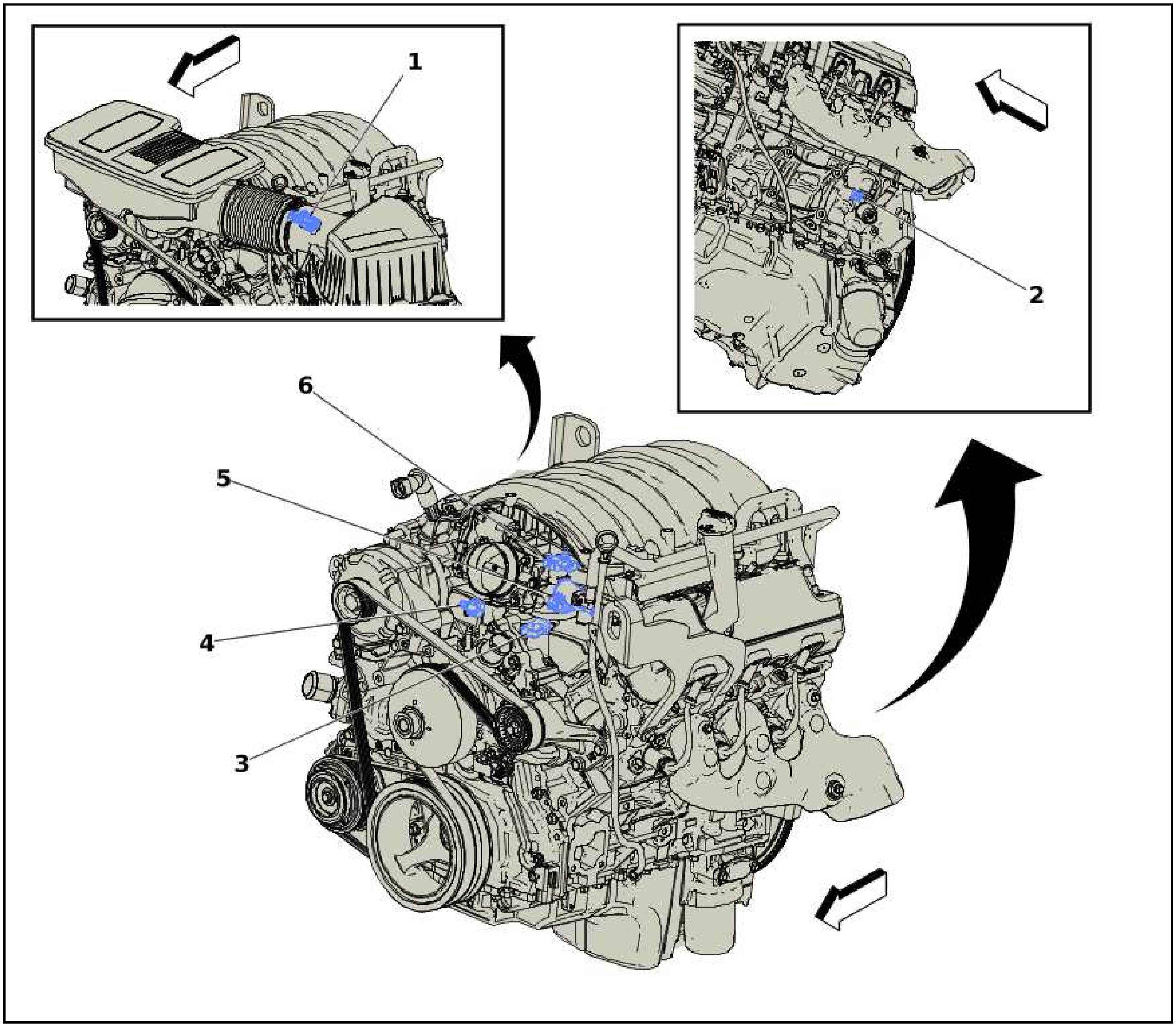


5002849

Items

(1)	T8B Ignition Coil 2 (L3B/L82/L84/L87/LV3)
(2)	T8D Ignition Coil 4 (L3B/L82/L84/L87/LV3)
(3)	T8F Ignition Coil 6 (L82/L84/L87/LV3)
(4)	Q17B Fuel Injector 2
(5)	Q17D Fuel Injector 4
(6)	Q17F Fuel Injector 6 (L82/L84/L87/LM2/LV3)
(7)	G18 High Pressure Fuel Pump
(8)	B310 Fuel Pressure/Temperature Sensor (L3B/L82/L84/L87/LV3)
(9)	Q17E Fuel Injector 5 (L82/L84/L87/LM2/LV3)
(10)	Q17C Fuel Injector 3
(11)	Q17A Fuel Injector 1
(12)	T8E Ignition Coil 5 (L82/L84/L87/LV3)
(13)	T8C Ignition Coil 3 (L3B/L82/L84/L87/LV3)
(14)	T8A Ignition Coil 1 (L3B/L82/L84/L87/LV3)

Engine Components - Left (LV3)

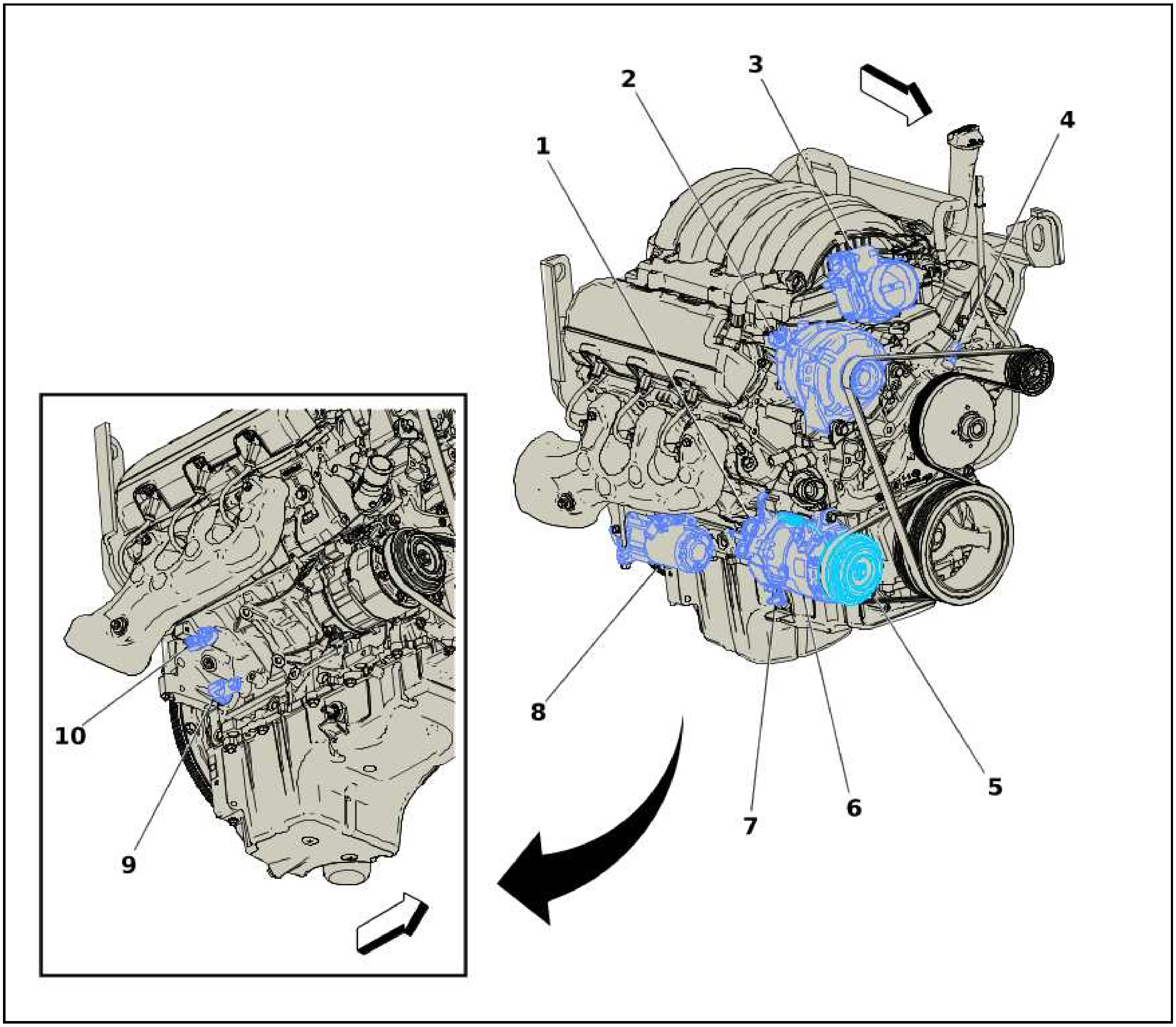


5002850

Items

(1)	B75C Multifunction Intake Air Sensor
(2)	B68A Knock Sensor 1 (L3B/L82/L84/L87/LV3)
(3)	Q43 Valve Lifter Oil Manifold Assembly (LV3)
(4)	B37B Engine Oil Pressure Sensor
(5)	Q12 Evaporative Emission Purge Solenoid Valve (L3B/L82/L84/L87/LV3)
(6)	B74 Manifold Absolute Pressure Sensor (L82/L84/L87/LV3)

Engine Components - Right (LV3)

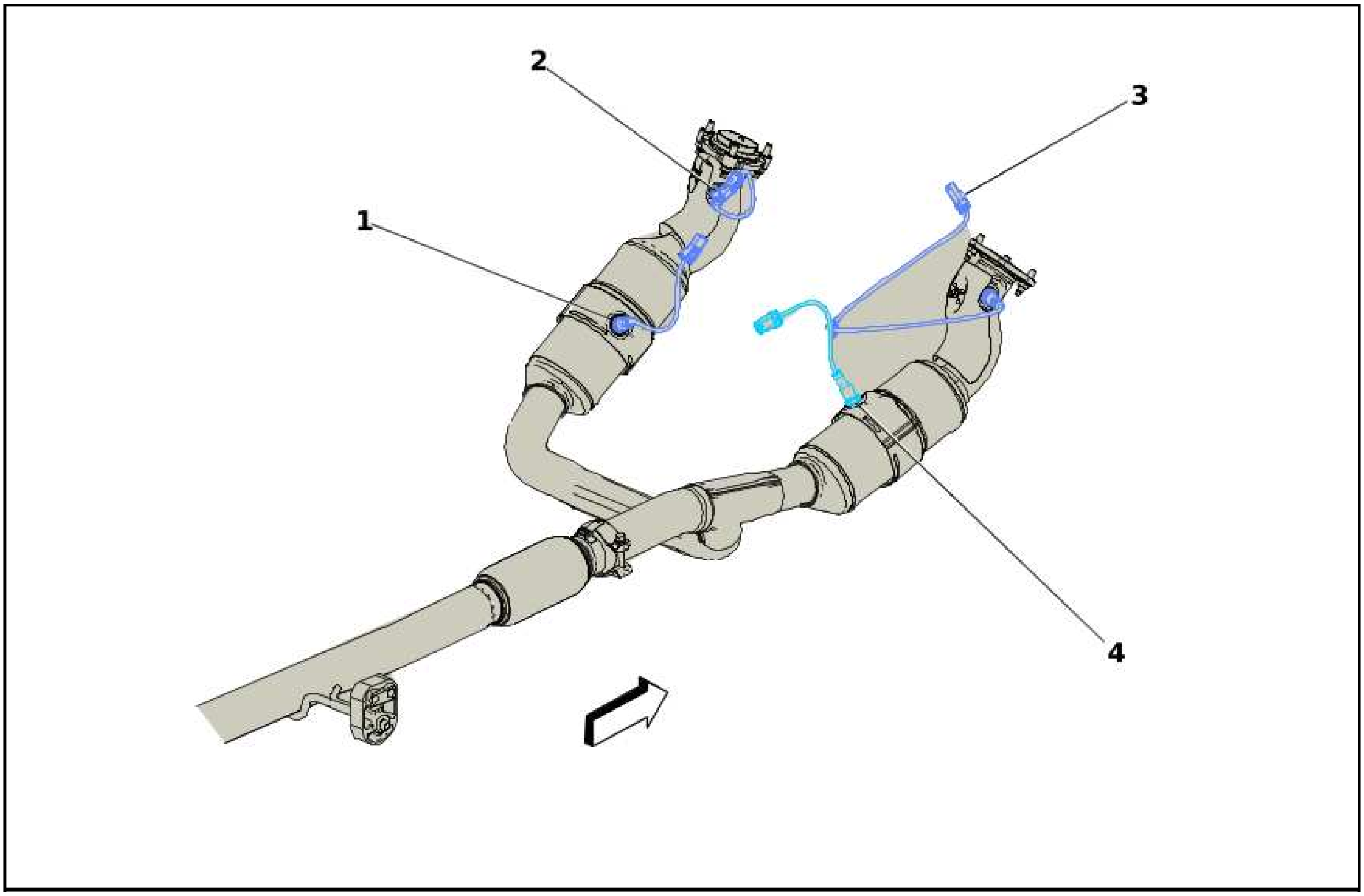


5002851

Items

(1)	Q46 A/C Compressor Solenoid Valve
(2)	G13 Generator
(3)	Q38 Throttle Body (-LM2)
(4)	B34 Engine Coolant Temperature Sensor (LV3/L82/L84/L87)
(5)	Q2 A/C Compressor Clutch
(6)	G1 A/C Compressor
(7)	B35 Engine Oil Level Switch (L82/L84/L87/LV3)
(8)	M64 Starter Motor
(9)	B26 Crankshaft Position Sensor
(10)	B68B Knock Sensor 2 (L3B/L82/L84/L87/LV3)

Engine Components - Oxygen Sensors (LV3)



Items

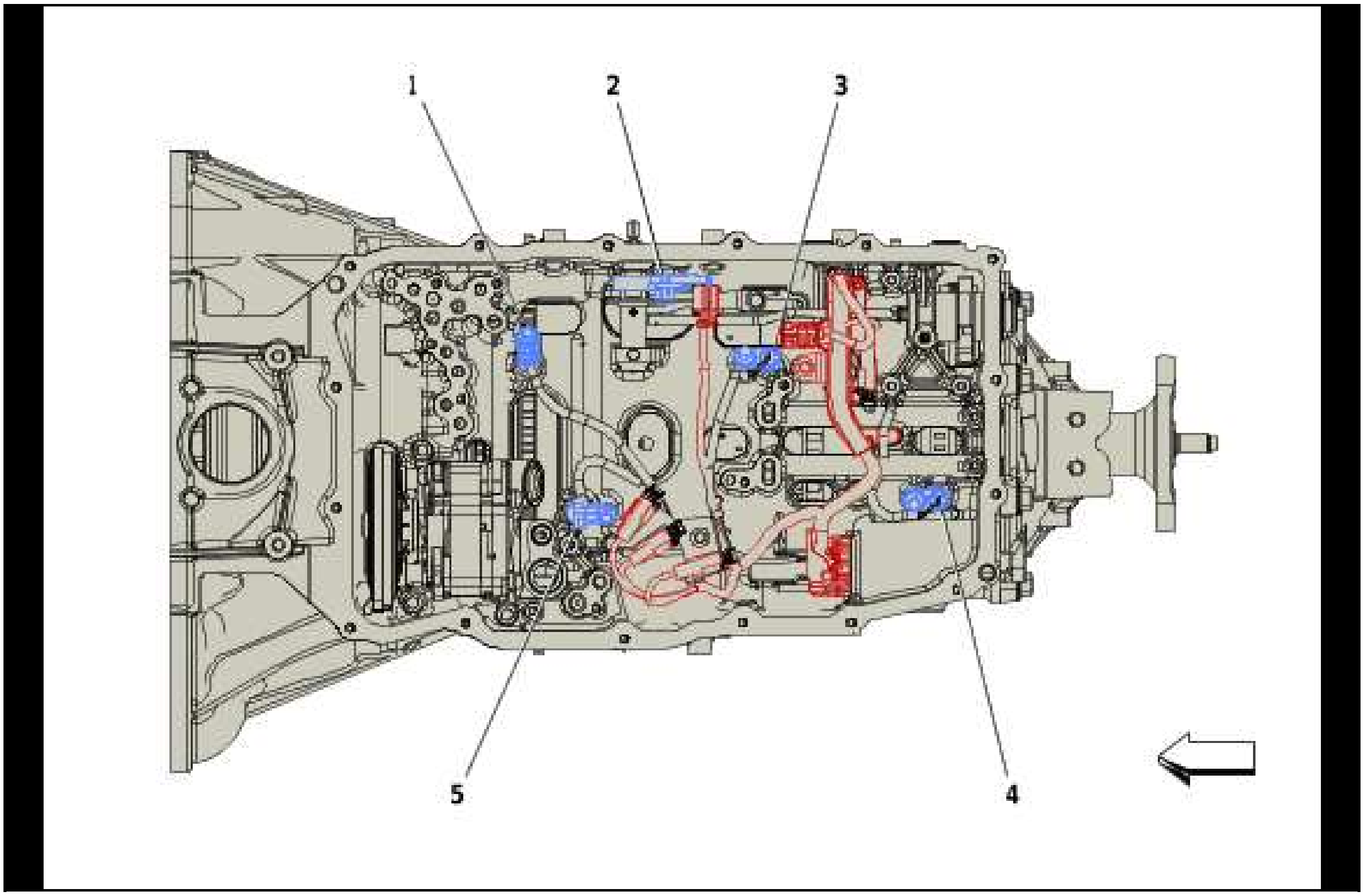
(1) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87/LV3)

(2) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3)

(3) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3)

(4) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87/LV3)

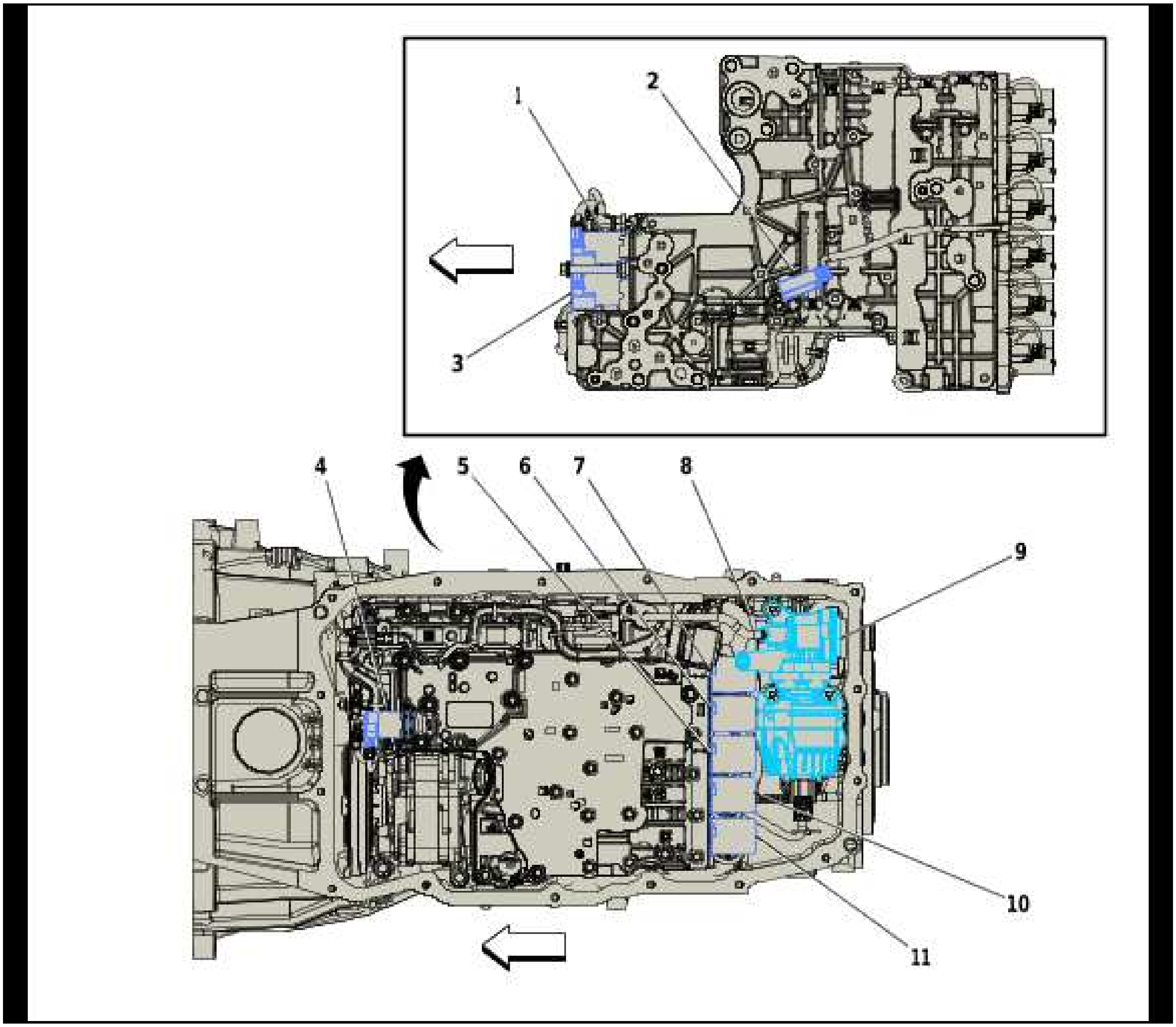
Automatic Transmission Components - Case (MQB)



Items

(1)	B14DA Transmission Intermediate Speed Sensor 1
(2)	B303 Transmission Range Sensor (MQB)
(3)	B14DB Transmission Intermediate Speed Sensor 2
(4)	B14A Transmission Output Shaft Speed Sensor
(5)	B14C Transmission Input Shaft Speed Sensor

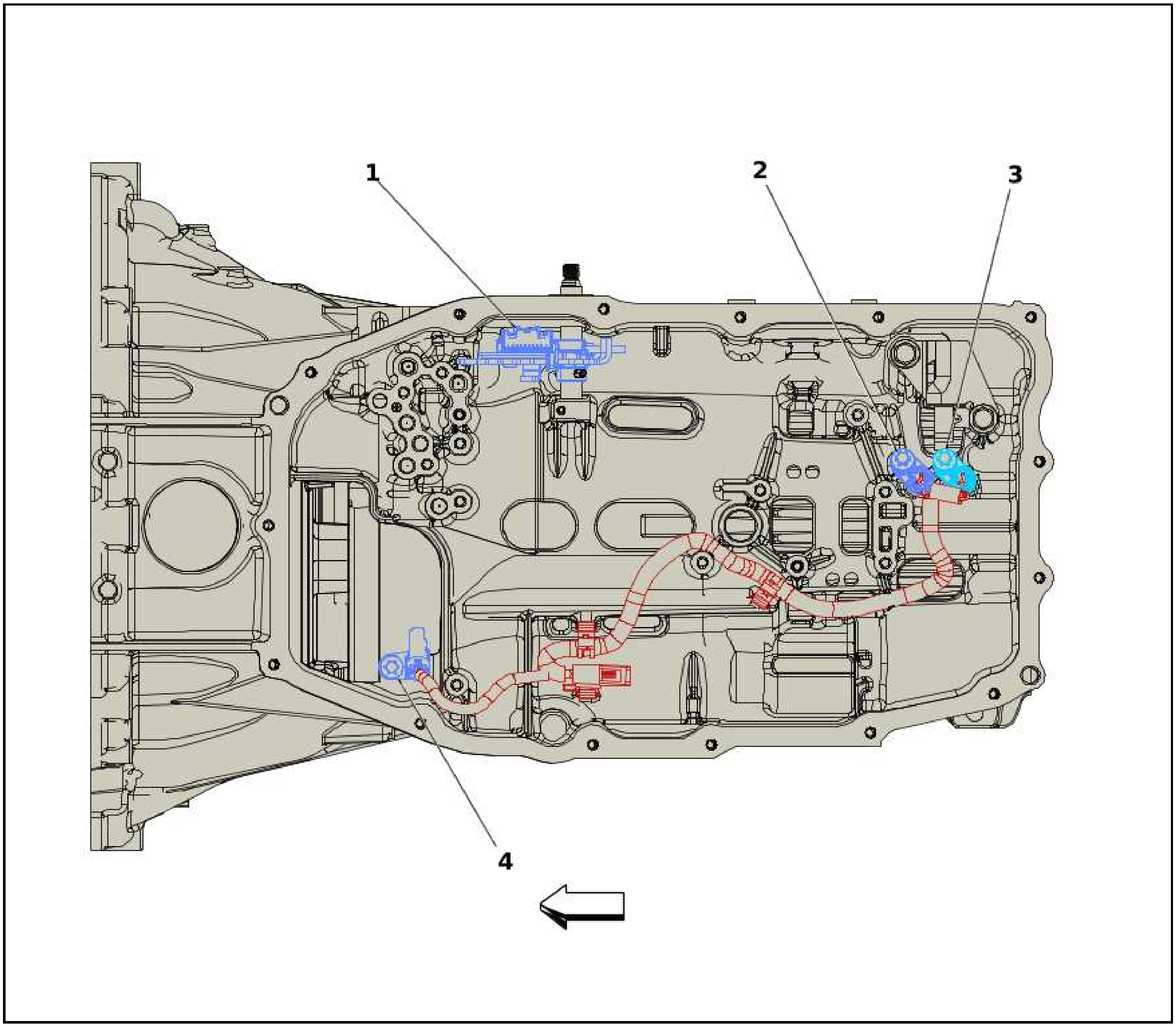
Automatic Transmission Components - Valve Body (MQB)



Items

(1)	Q77G Transmission Control Solenoid Valve 7 (MQB/MQE)
(2)	B13 Transmission Fluid Temperature Sensor
(3)	Q77H Transmission Control Solenoid Valve 8 (MQB/MQE)
(4)	Q77J Transmission Control Solenoid Valve 9 (MQB/MQE)
(5)	Q77B Transmission Control Solenoid Valve 2 (MQB/MQE)
(6)	Q77E Transmission Control Solenoid Valve 5 (MQB/MQE)
(7)	Q77F Transmission Control Solenoid Valve 6 (MQB/MQE)
(8)	Q77C Transmission Control Solenoid Valve 3 (MQB/MQE)
(9)	G5 Transmission Fluid Pump - Electric/Auxiliary (MQB)
(10)	Q77A Transmission Control Solenoid Valve 1 (MQB/MQE)
(11)	Q77D Transmission Control Solenoid Valve 4 (MQB/MQE)

Automatic Transmission Components - Case (MQE)

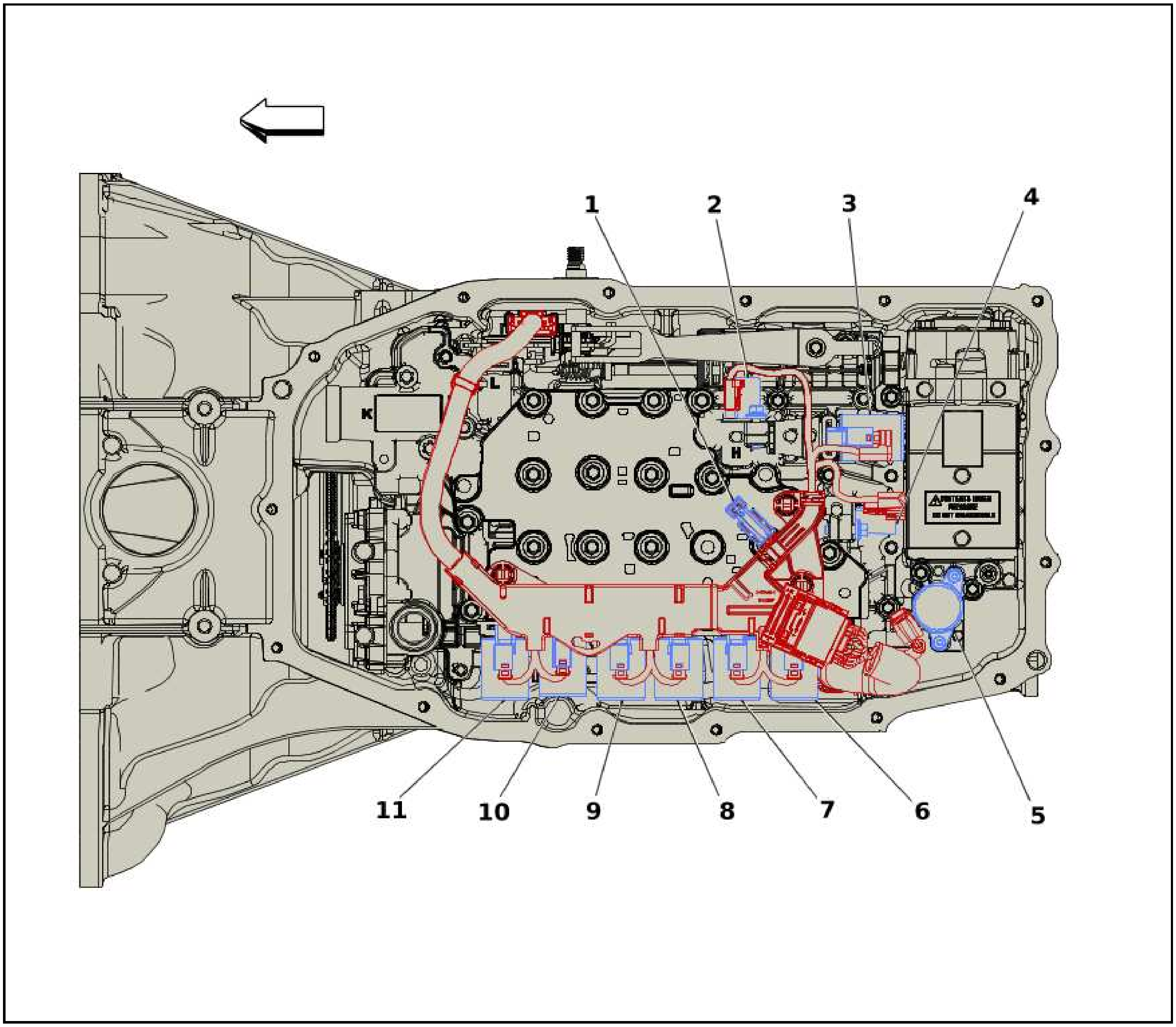


4092029

Items

(1)	B15 Transmission Internal Mode Switch
(2)	B14D Transmission Intermediate Shaft Speed Sensor
(3)	B14A Transmission Output Shaft Speed Sensor
(4)	B14C Transmission Input Shaft Speed Sensor

Automatic Transmission Components - Valve Body (MQE)

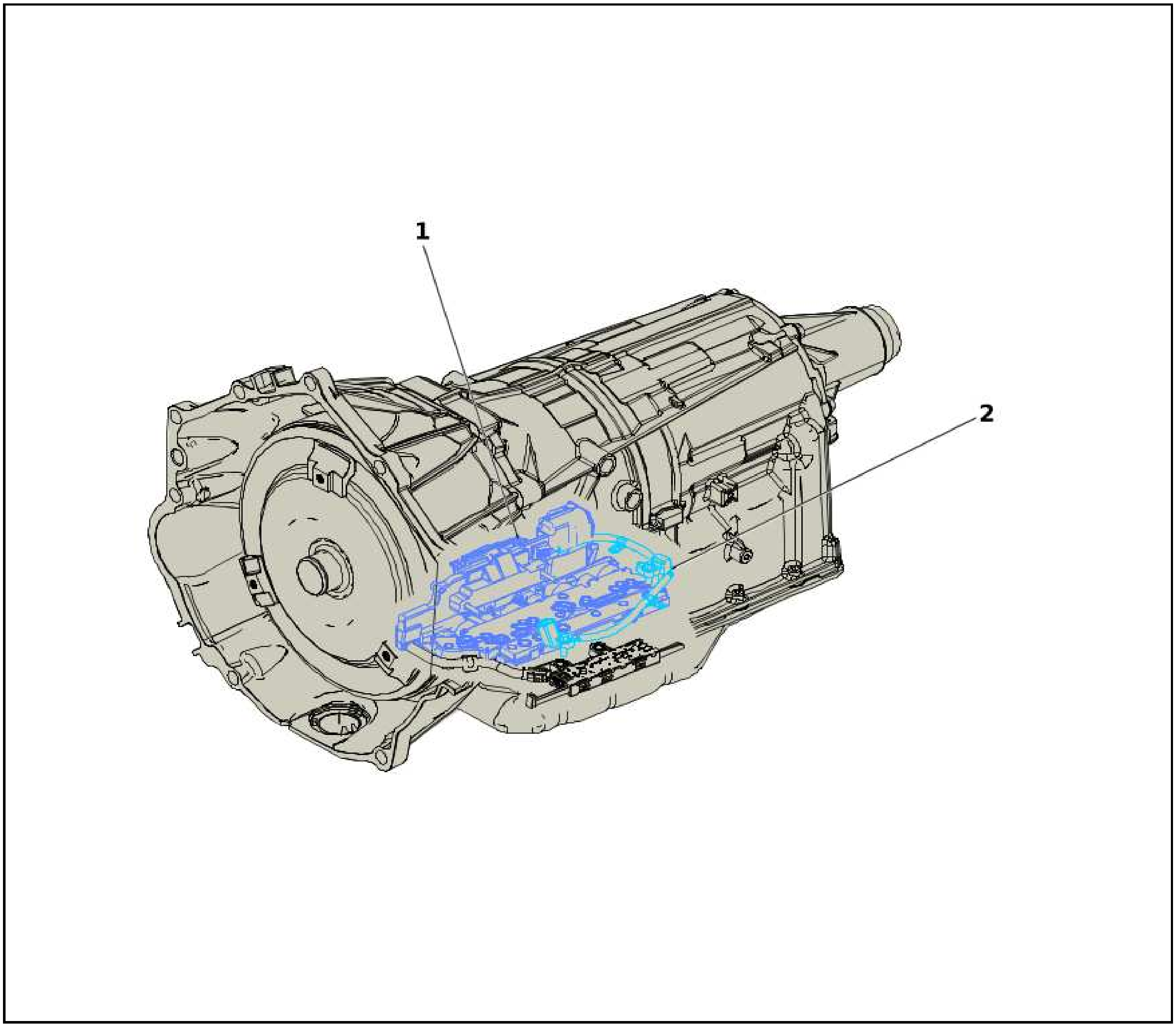


4098167

Items

(1)	B13 Transmission Fluid Temperature Sensor
(2)	Q77H Transmission Control Solenoid Valve 8 (MQB/MQE)
(3)	Q77F Transmission Control Solenoid Valve 6 (MQB/MQE)
(4)	Q77J Transmission Control Solenoid Valve 9 (MQB/MQE)
(5)	B280 Automatic Transmission Accumulator Solenoid Valve (MQE)
(6)	Q77B Transmission Control Solenoid Valve 2 (MQB/MQE)
(7)	Q77A Transmission Control Solenoid Valve 1 (MQB/MQE)
(8)	Q77E Transmission Control Solenoid Valve 5 (MQB/MQE)
(9)	Q77C Transmission Control Solenoid Valve 3 (MQB/MQE)
(10)	Q77D Transmission Control Solenoid Valve 4 (MQB/MQE)
(11)	Q77G Transmission Control Solenoid Valve 7 (MQB/MQE)

Automatic Transmission Components (MYC)

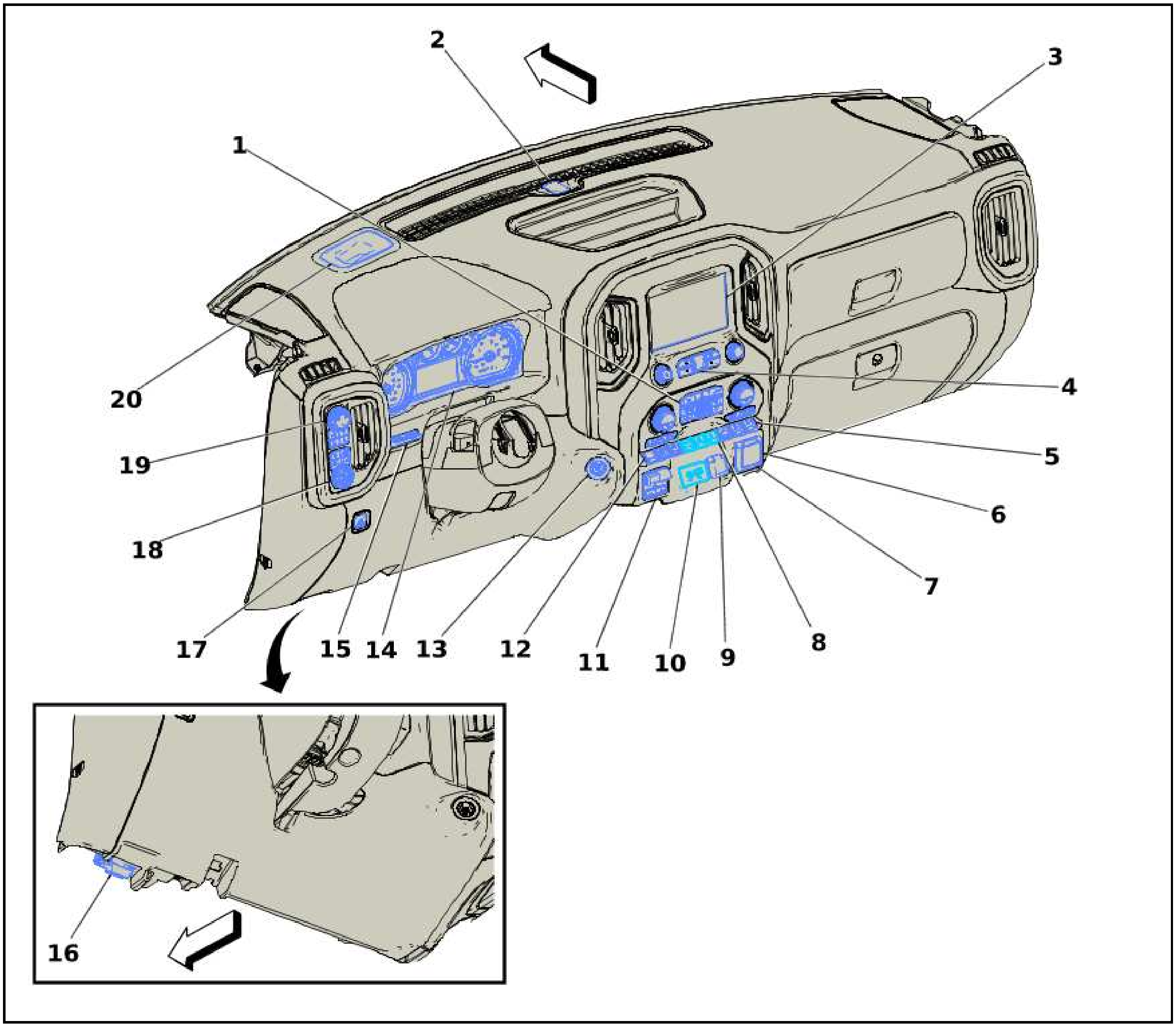


Items

(1)	Q8 Control Solenoid Valve Assembly
(2)	B14A Transmission Output Shaft Speed Sensor

Instrument Panel/Center Console Component Views

Instrument Panel - Front

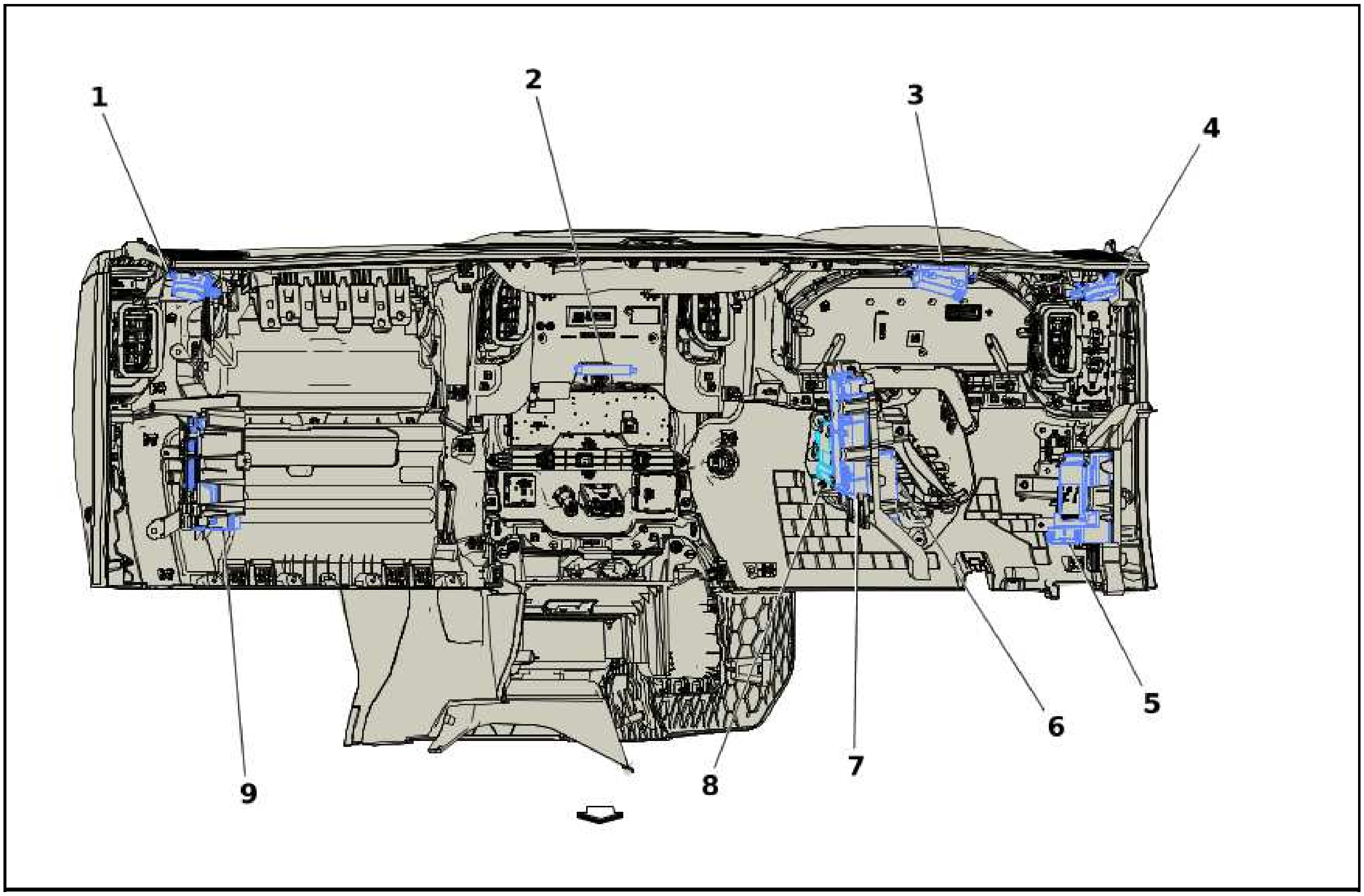


5034745

Items

(1)	A26 HVAC Controls (IOR)
(2)	B10B Ambient Light/Sunload Sensor
(3)	P17 Info Display Module
(4)	A22 Radio Controls (UIR)
(5)	S171R Instrument Panel Center Accessory Function Switch - Right
(6)	X81 Accessory Power Receptacle - 110V AC (KI4)
(7)	X81B Accessory Power Receptacle - 220V AC (KI5)
(8)	S86 Vehicle Stability Control Switch
(9)	X80G Accessory Power Receptacle - Instrument Panel
(10)	X92 USB Receptacle
(11)	S76 Trailer Brake Control Switch
(12)	S171L Instrument Panel Center Accessory Function Switch - Left
(13)	S38 Ignition Mode Switch (BTM)
(14)	P16 Instrument Cluster
(15)	S27 Head-Up Display Switch (UV6)
(16)	X84 Data Link Connector
(17)	B80 Park Brake Switch
(18)	S30 Headlamp Switch
(19)	S126 Drive Mode Select Switch (URC)
(20)	P29 Head-Up Display (UV6)

Instrument Panel - Rear

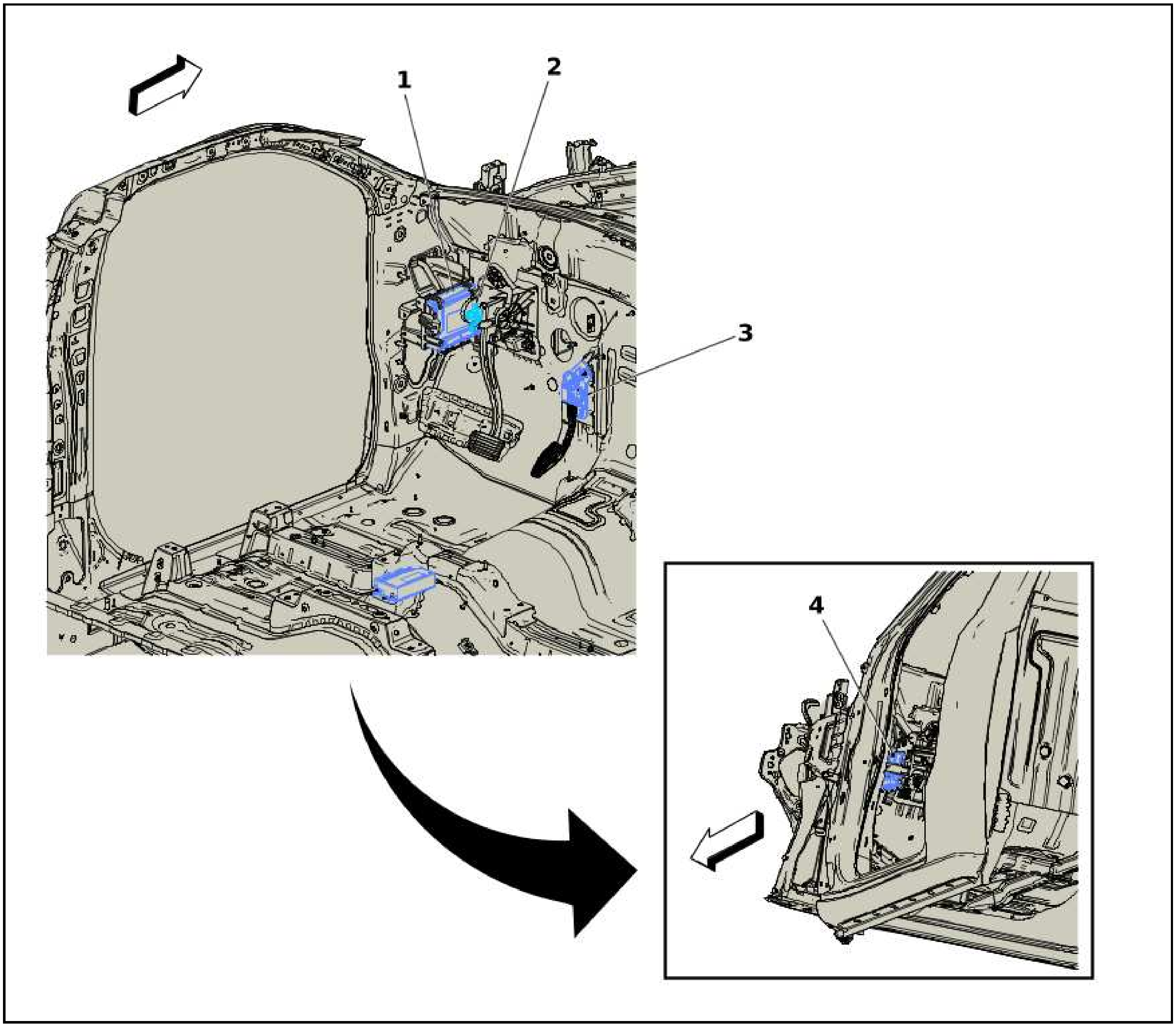


5034746

Items

(1)	P19W Speaker - Right Instrument Panel
(2)	T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)
(3)	P43 Collision Alert Indicators ((UHX/UEU)-UV6)
(4)	P19J Speaker - Left Instrument Panel
(5)	K9 Body Control Module
(6)	K73 Telematics Communication Interface Control Module (UE1)
(7)	K33 HVAC Control Module
(8)	K56 Serial Data Gateway Module
(9)	A11 Radio

Behind Instrument Panel - Left



5023365

Items

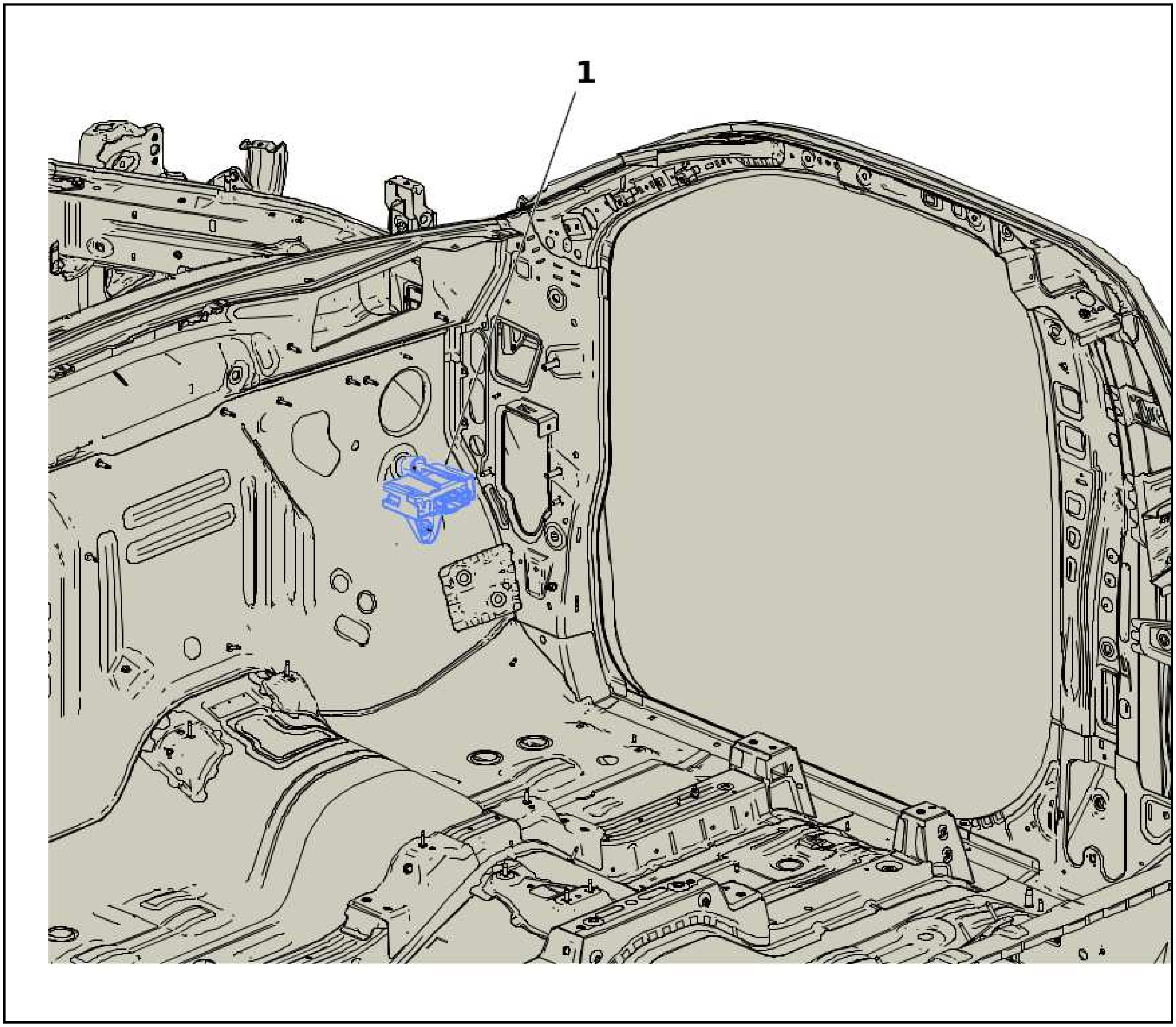
(1) K9 Body Control Module

(2) B22 Brake Pedal Position Sensor

(3) B107 Accelerator Pedal Position Sensor

(4) K84 Keyless Entry Control Module (BTM)

Behind Instrument Panel - Right

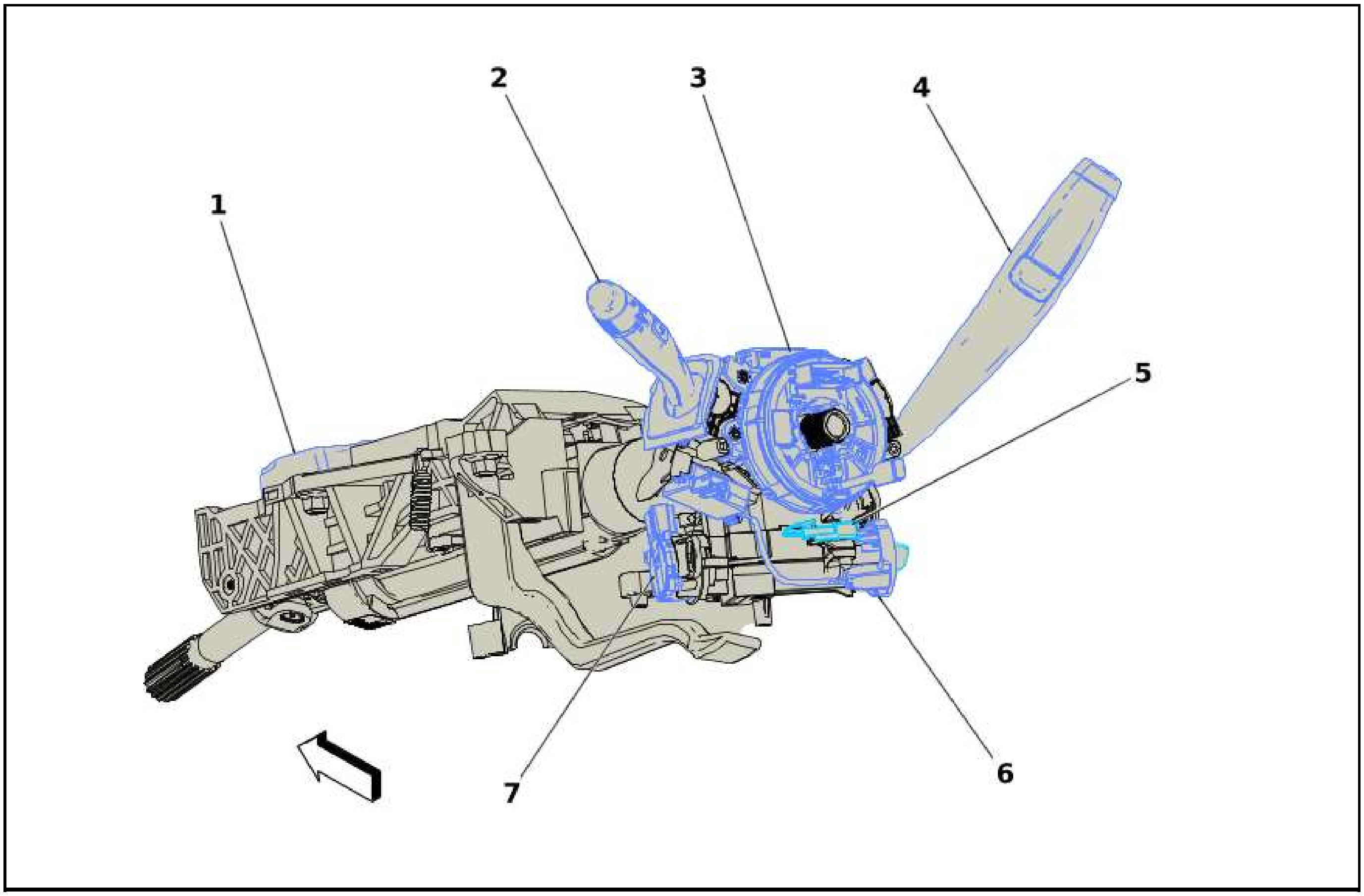


5023366

Items

(1) T19 Power Supply Transformer (KL9)

Steering Column Components

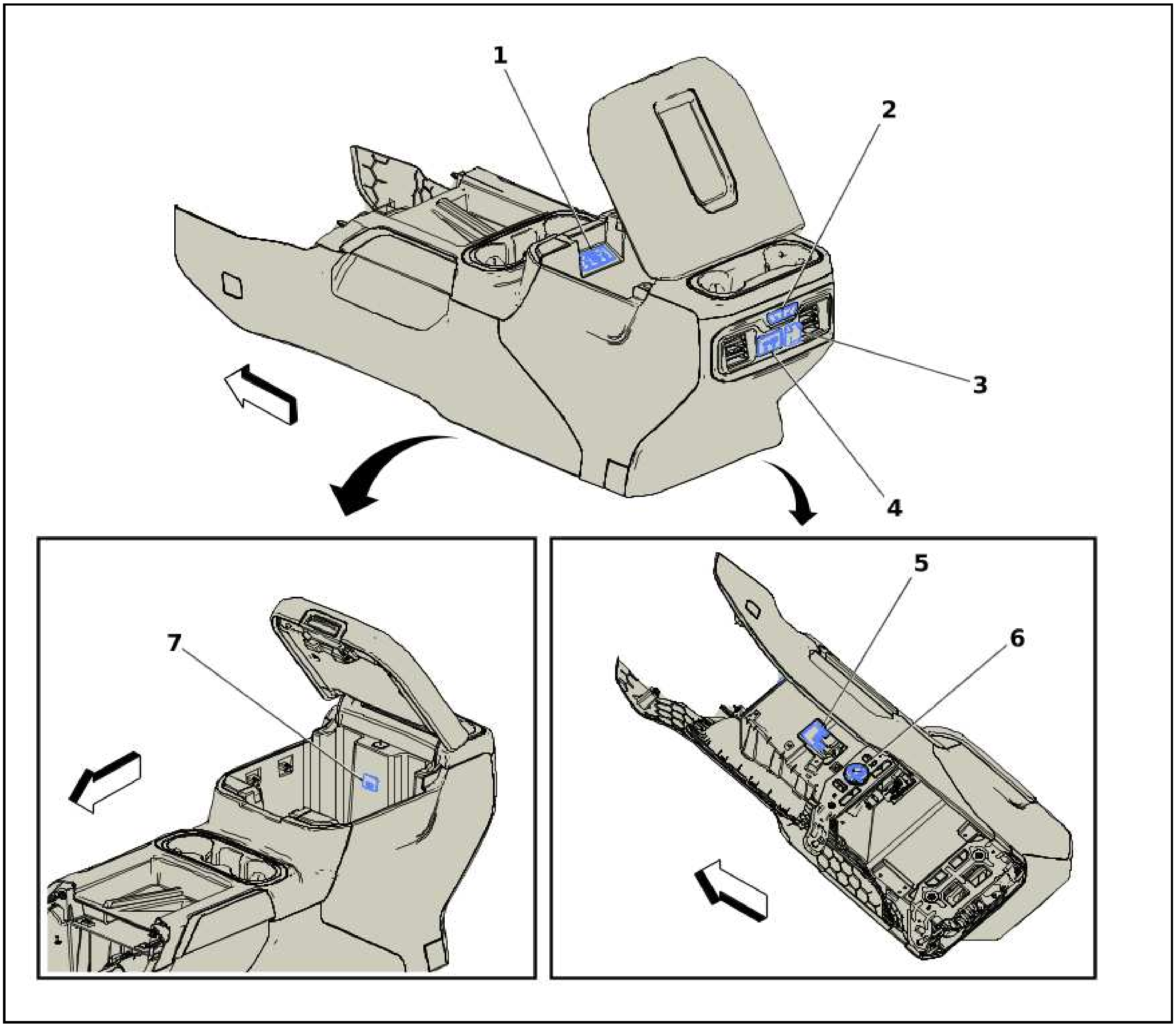


5034747

Items

(1)	K60 Steering Column Lock Module (BTM)
(2)	S78 Turn Signal/Multifunction Switch
(3)	X85 Steering Wheel Air Bag Coil
(4)	S2 Transmission Manual Shift Switch
(5)	M93 Key Capture Solenoid Actuator (-BTM)
(6)	K89 Immobilizer Control Module
(7)	S39 Ignition Switch (-BTM)

Floor Console Components



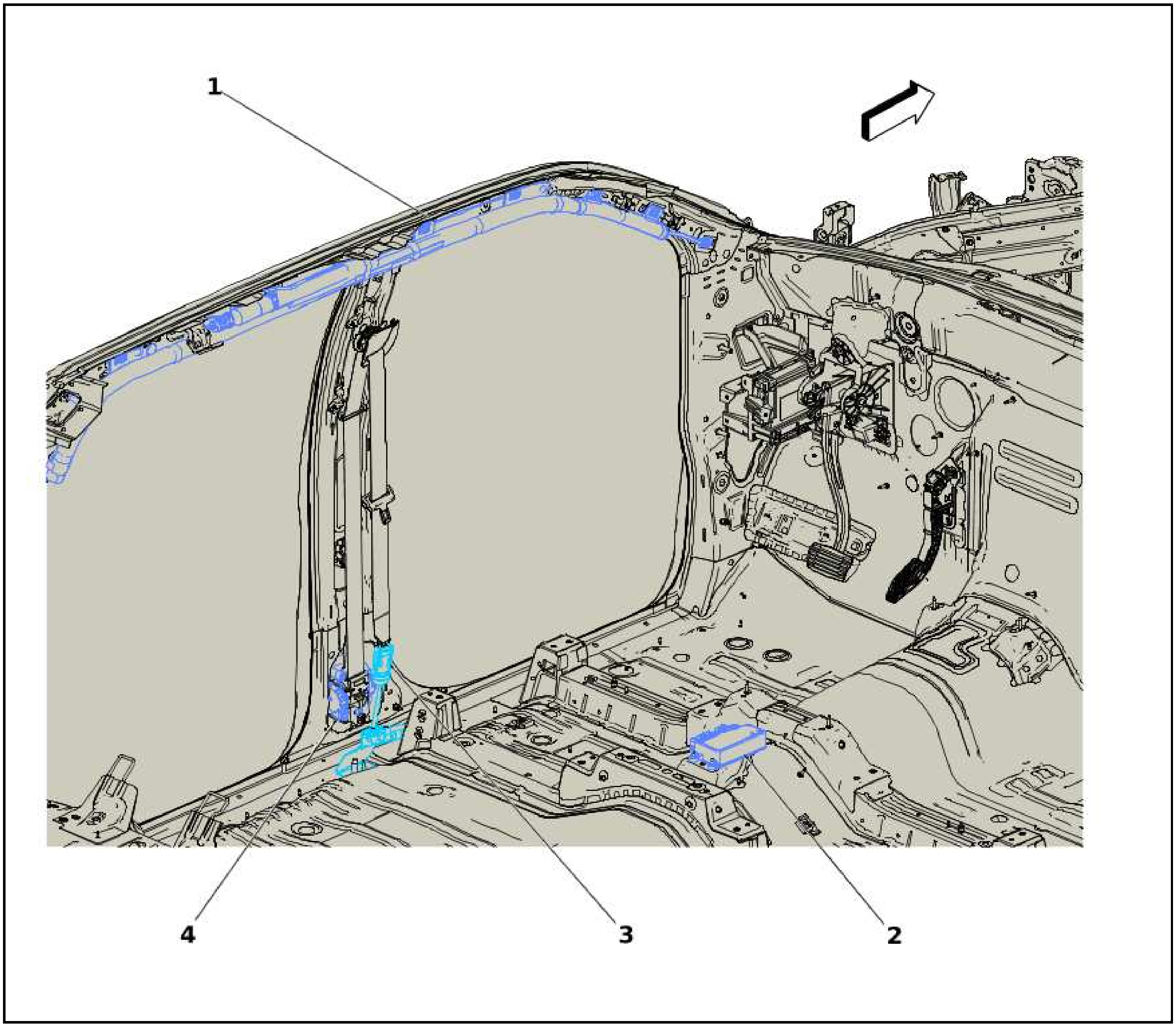
5002853

Items

(1)	X83 Auxiliary Audio Input
(2)	S32R Seat Heating Switch - Rear (KA6)
(3)	X80L Accessory Power Receptacle - Center Console Rear (A50/D07)
(4)	X92C USB Receptacle - Center Console Rear (D07/AZ3)
(5)	K89 Immobilizer Control Module
(6)	T22 Mobile Device Wireless Charger Module (K4C)
(7)	E28 Center Console Compartment Lamp (D07)

Passenger Compartment/Roof Component Views

Passenger Compartment - Left Front (Extended Cab/Crew Cab)



5034748

Items

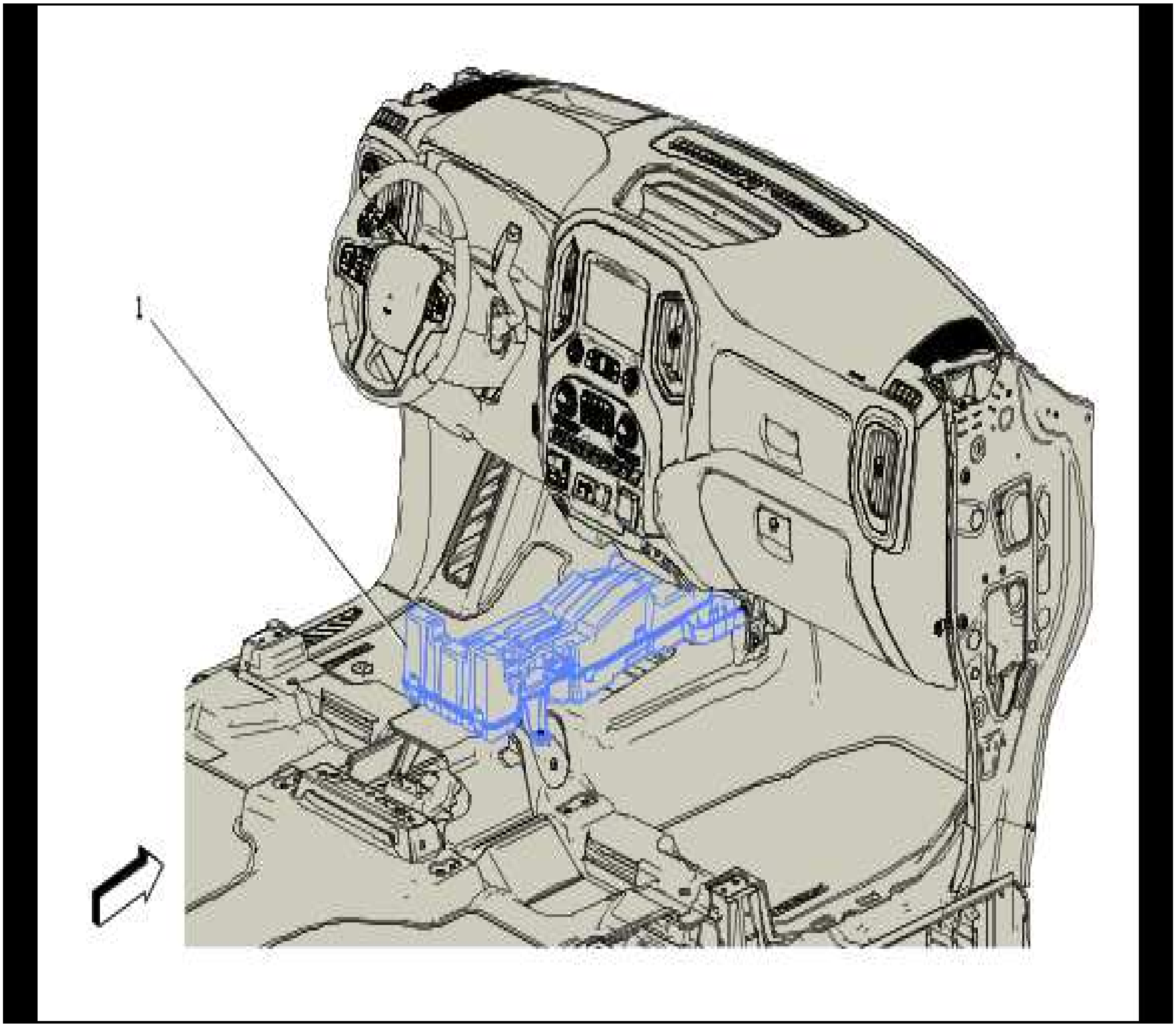
(1) F105L Roof Rail Air Bag - Left

(2) K36 Inflatable Restraint Sensing and Diagnostic Module

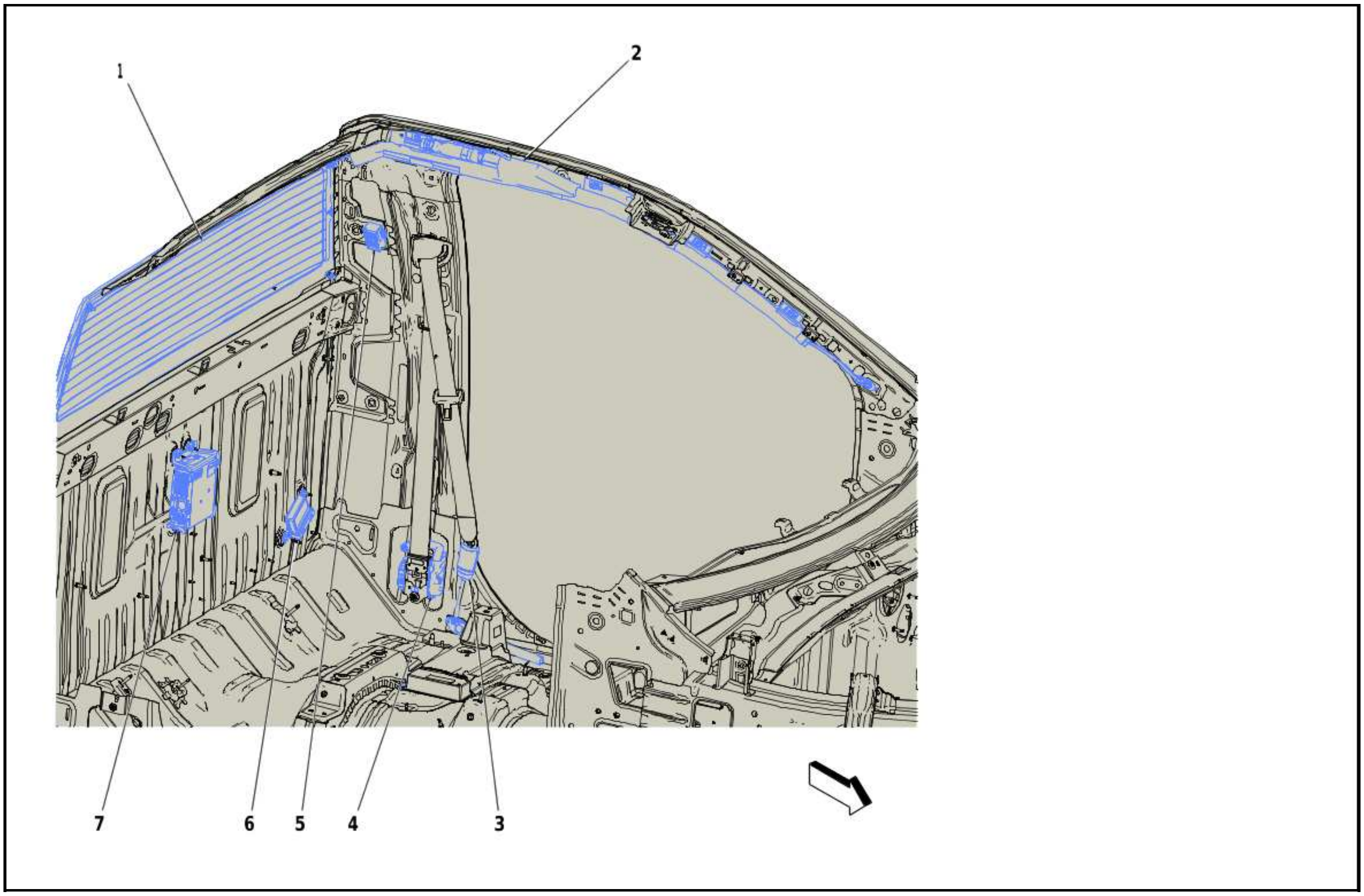
(3) F113D Seat Belt Anchor Pretensioner - Driver

(4) F112D Seat Belt Retractor Pretensioner - Driver

Passenger Compartment - Middle Front (UQA)



Passenger Compartment - Left Rear (Regular Cab)

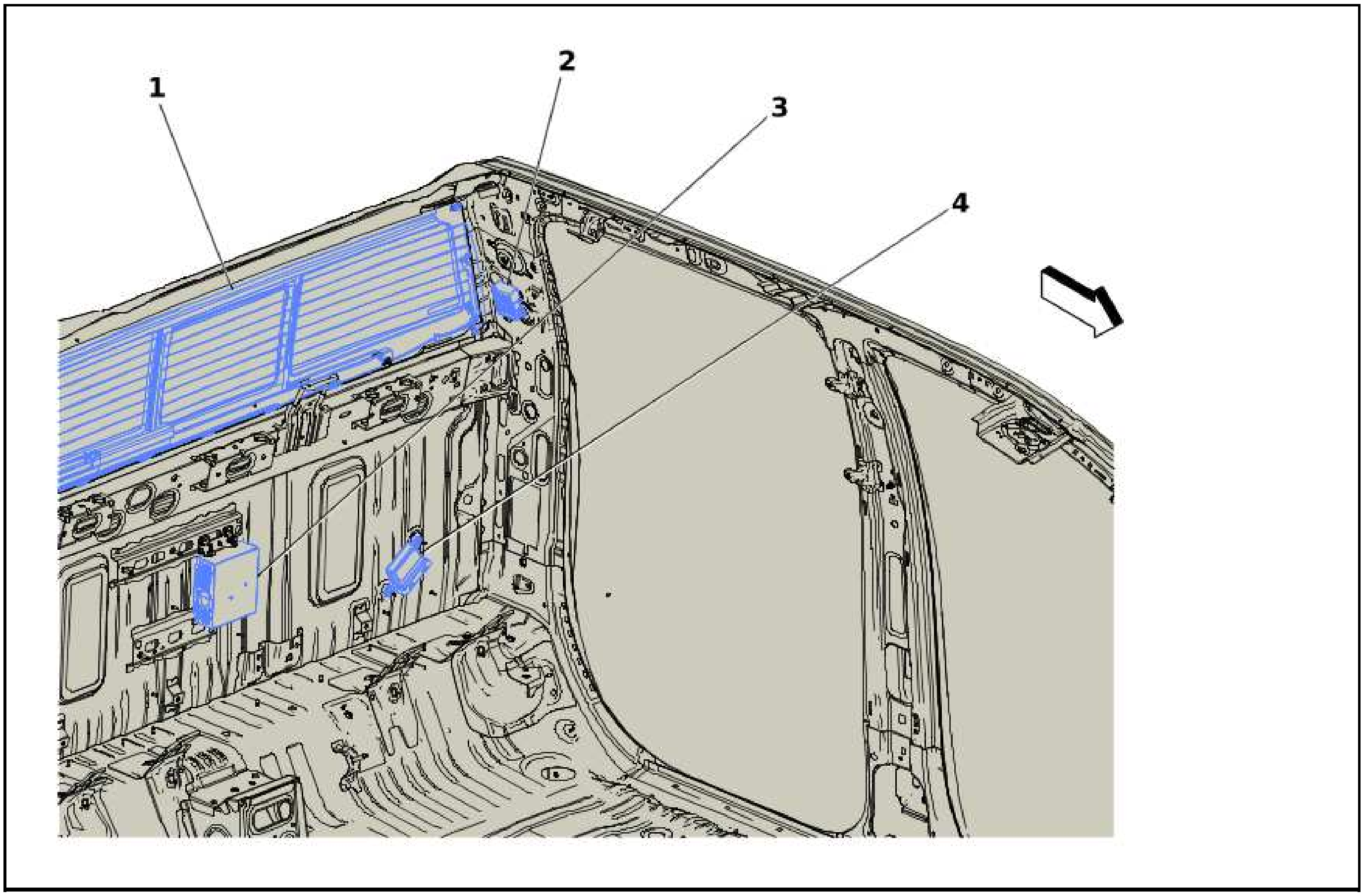


5023367

Items

(1)	E18 Rear Defogger Grid
(2)	F105L Roof Rail Air Bag - Left
(3)	F113D Seat Belt Anchor Pretensioner - Driver
(4)	F112D Seat Belt Retractor Pretensioner - Driver
(5)	K77 Remote Control Door Lock Receiver
(6)	K182 Parking Assist Control Module (UD5/ UD7)
(7)	T1 Accessory DC/AC Power Inverter Module (KI4/KI5)

Passenger Compartment - Left Rear (Extended Cab/Crew Cab)

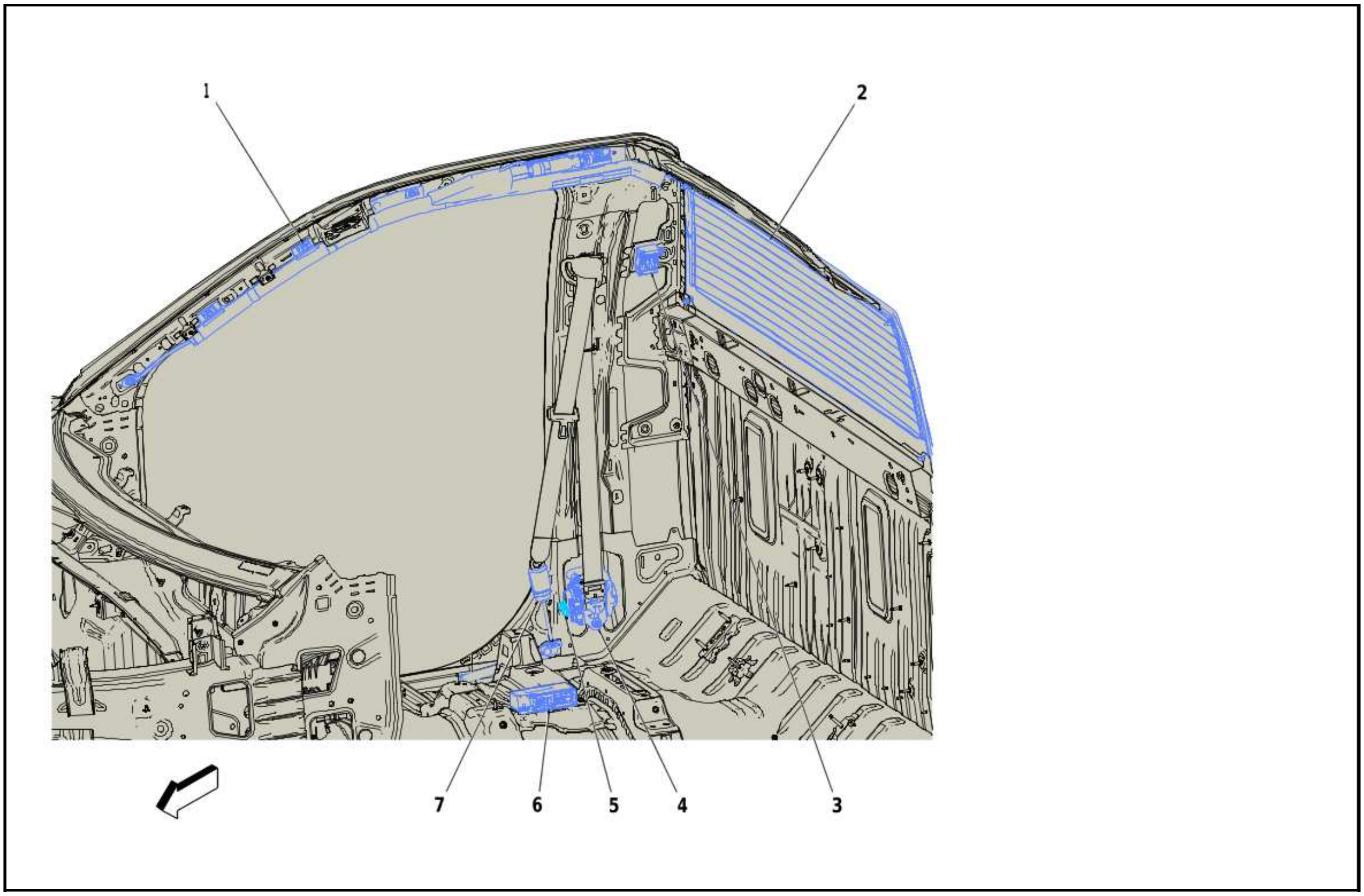


5034749

Items

(1)	E18 Rear Defogger Grid
(2)	K77 Remote Control Door Lock Receiver
(3)	T1 Accessory DC/AC Power Inverter Module (KI4/KI5)
(4)	K182 Parking Assist Control Module (UD5/UD7)

Passenger Compartment - Right Rear (Regular Cab)



5023368

Items

(1) F105R Roof Rail Air Bag - Right

(2) E18 Rear Defogger Grid

(3) K77 Remote Control Door Lock Receiver

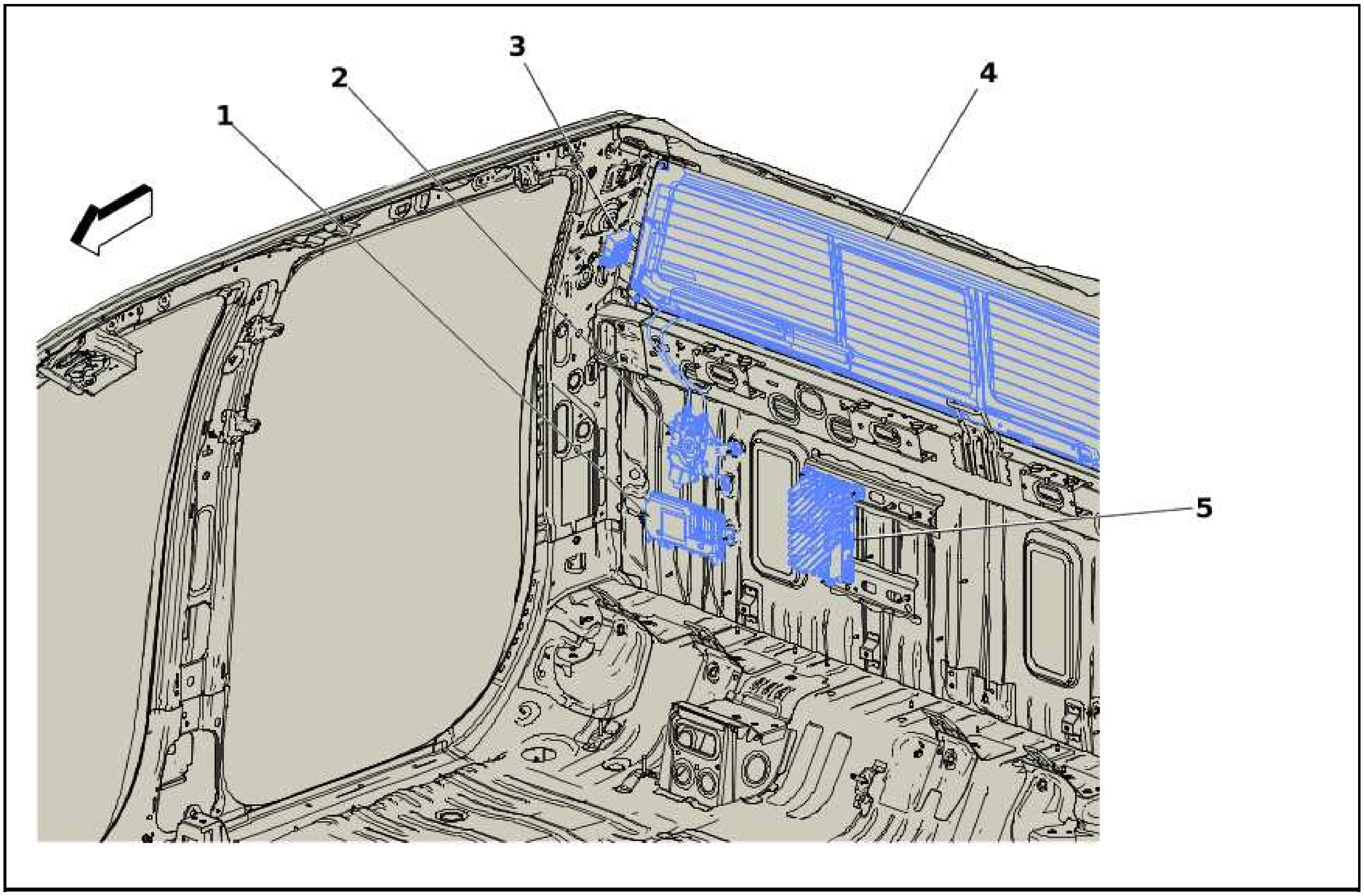
(4) F112P Seat Belt Retractor Pretensioner - Passenger

(5) B61P Seat Belt Tension Sensor - Passenger

(6) K36 Inflatable Restraint Sensing and Diagnostic Module

(7) F113P Seat Belt Anchor Pretensioner - Passenger

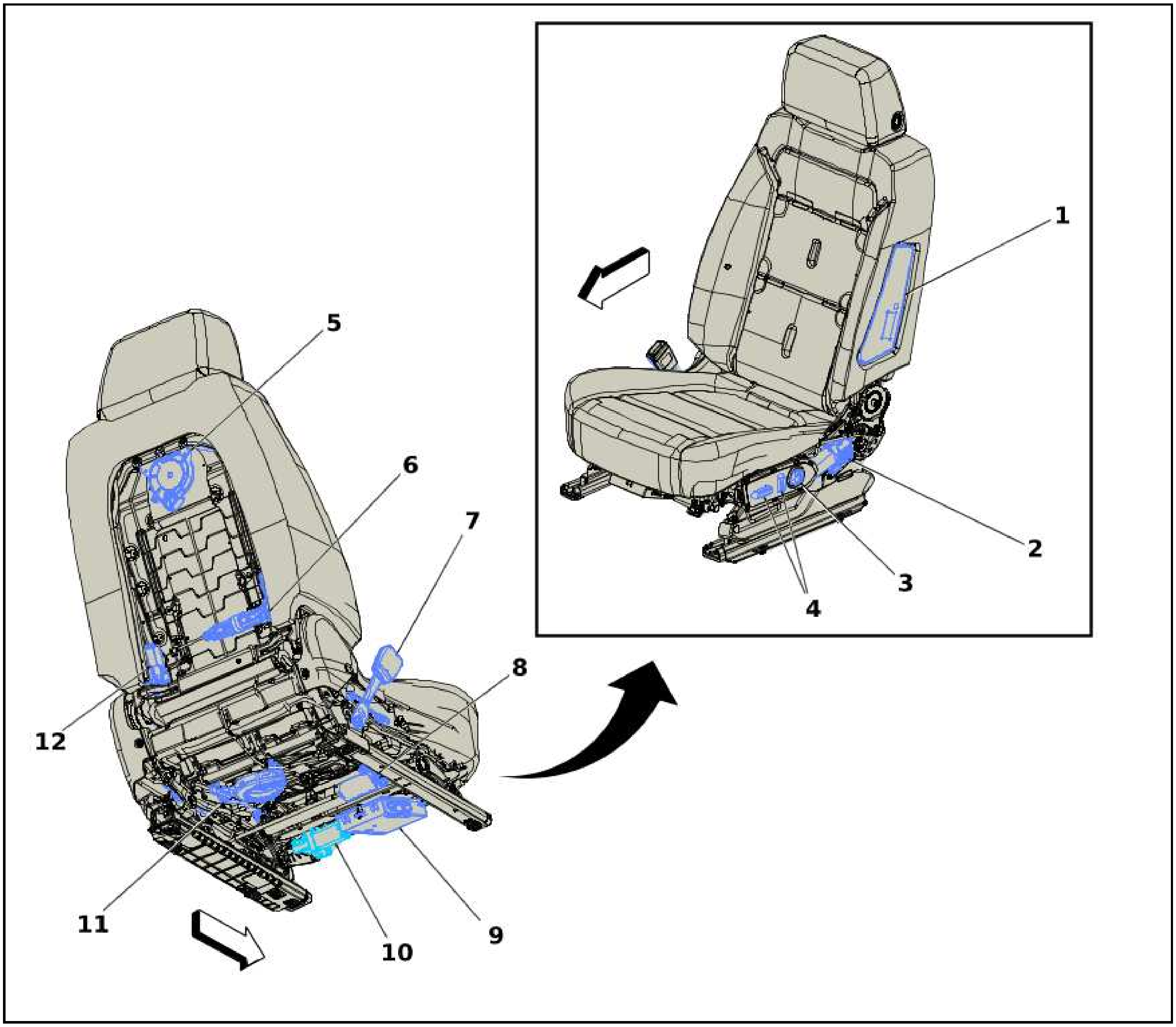
Passenger Compartment - Right Rear (Extended Cab/Crew Cab)



Items

(1)	K157 Video Processing Control Module (UVI/UV2)
(2)	M63 Sliding Rear Window Motor (A48)
(3)	K77 Remote Control Door Lock Receiver
(4)	E18 Rear Defogger Grid
(5)	T3 Audio Amplifier (UQA)

Driver Seat Components

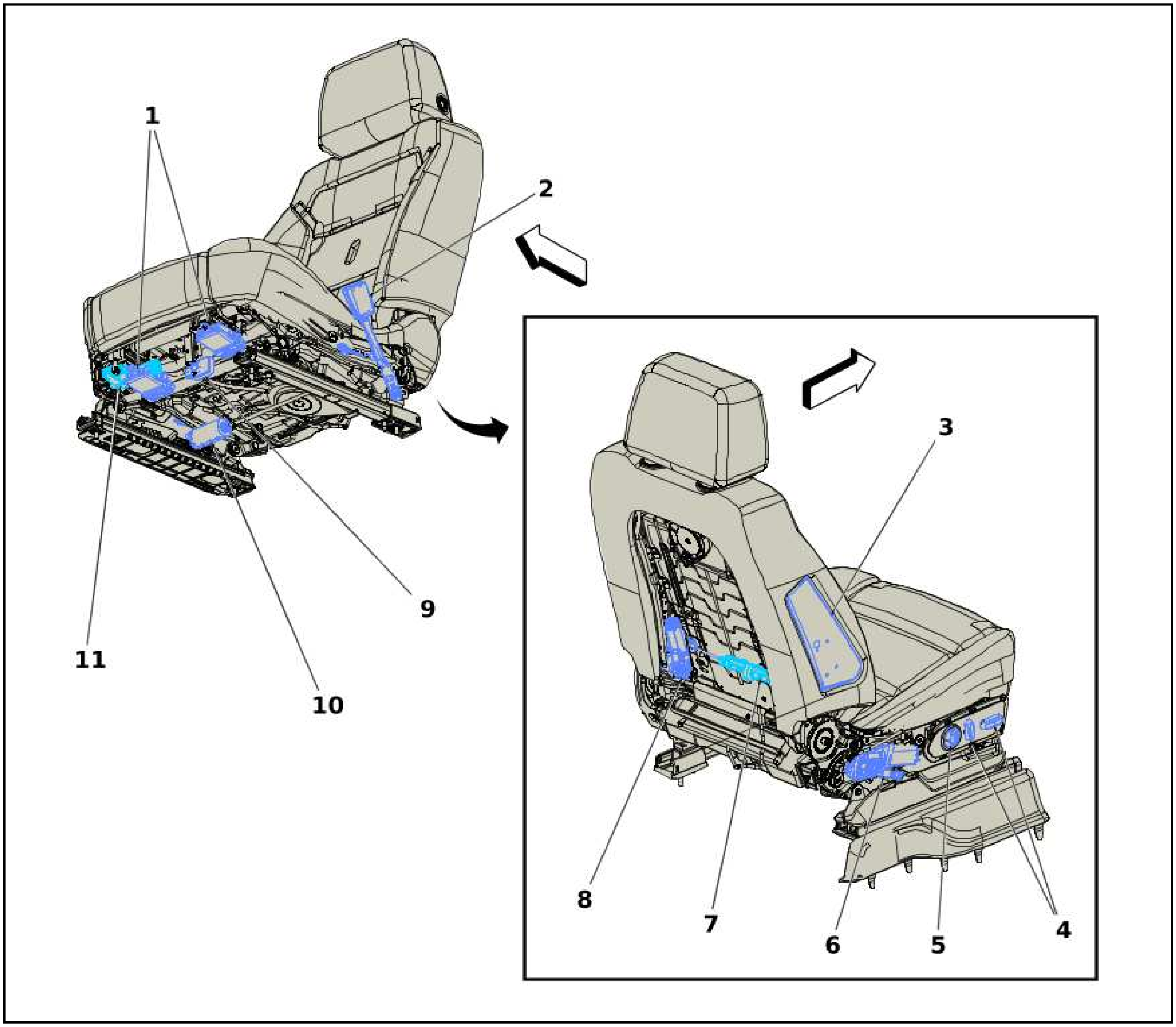


5034215

Items

(1)	F106D Seat Side Air Bag - Driver
(2)	M50D Seat Front Vertical Motor - Driver
(3)	S65D Seat Lumbar Support Switch - Driver (A2X)
(4)	S64D Seat Adjuster Switch - Driver
(5)	M73A Seat Blower Motor - Driver Back (KQV)
(6)	A14D Seat Lumbar Support Pump - Driver (A2X)
(7)	B88D Seat Belt Switch - Driver
(8)	M51D Seat Horizontal Motor - Driver
(9)	K40 Seat Memory Control Module (A45)
(10)	M56D Seat Recline Motor - Driver
(11)	M73C Seat Blower Motor - Driver Cushion (KQV)
(12)	M56D Seat Recline Motor - Driver

Passenger Seat Components

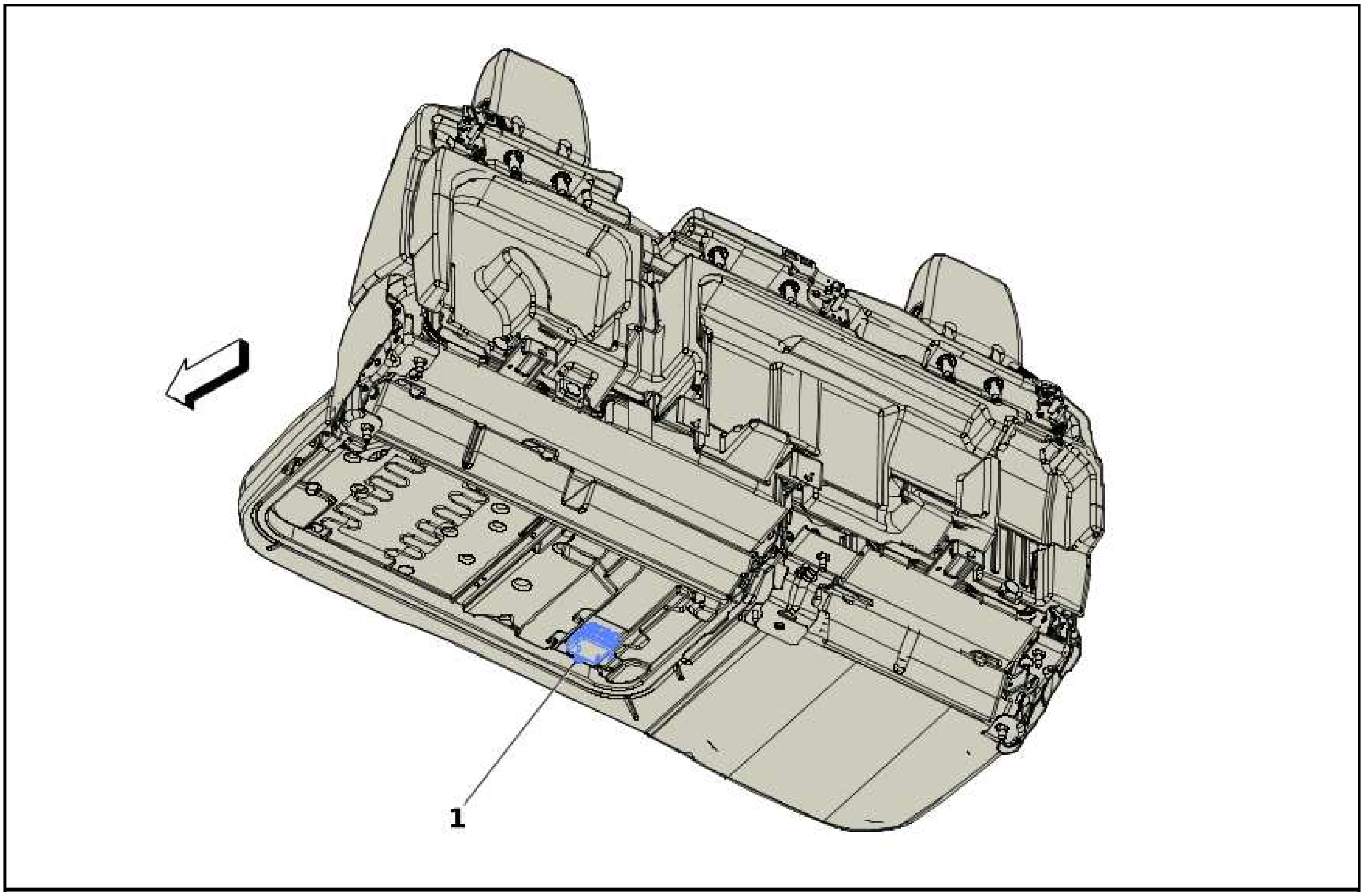


5034216

Items

(1)	K29F Seat Heating Control Module - Front (KQV/KA1)
(2)	B88P Seat Belt Switch - Passenger
(3)	F106P Seat Side Air Bag - Passenger
(4)	S64P Seat Adjuster Switch - Passenger
(5)	S65P Seat Lumbar Support Switch - Passenger (A7K)
(6)	M55P Seat Rear Vertical Motor - Passenger
(7)	A14P Seat Lumbar Support Pump - Passenger (A7K)
(8)	M50P Seat Front Vertical Motor - Passenger
(9)	K85 Passenger Presence Module
(10)	M51P Seat Horizontal Motor - Passenger
(11)	M56P Seat Recline Motor - Passenger

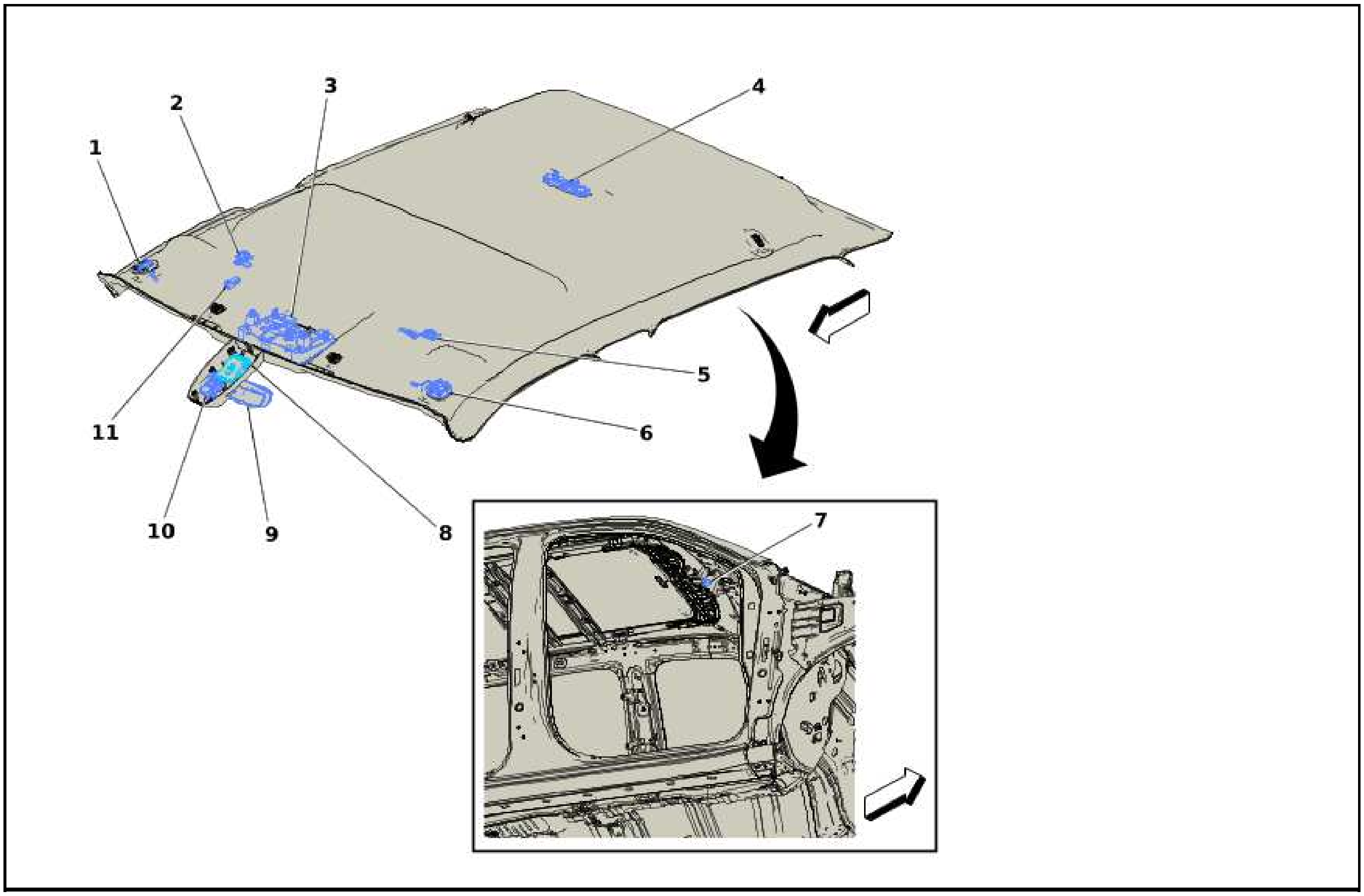
Rear Seat Components



Items

(1)	K29R Seat Heating Control Module - Rear (KA6)

Headliner Components



5002854

Items

(1) A3R Sunshade - Right

(2) B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)

(3) A98 Front Overhead Console Assembly

(4) E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)

(5) B24LF Mobile Telephone Microphone - Left Front

(6) A3L Sunshade - Left

(7) M69 Sunroof Motor (CF5)

(8) B174W Frontview Camera - Windshield (ASV)

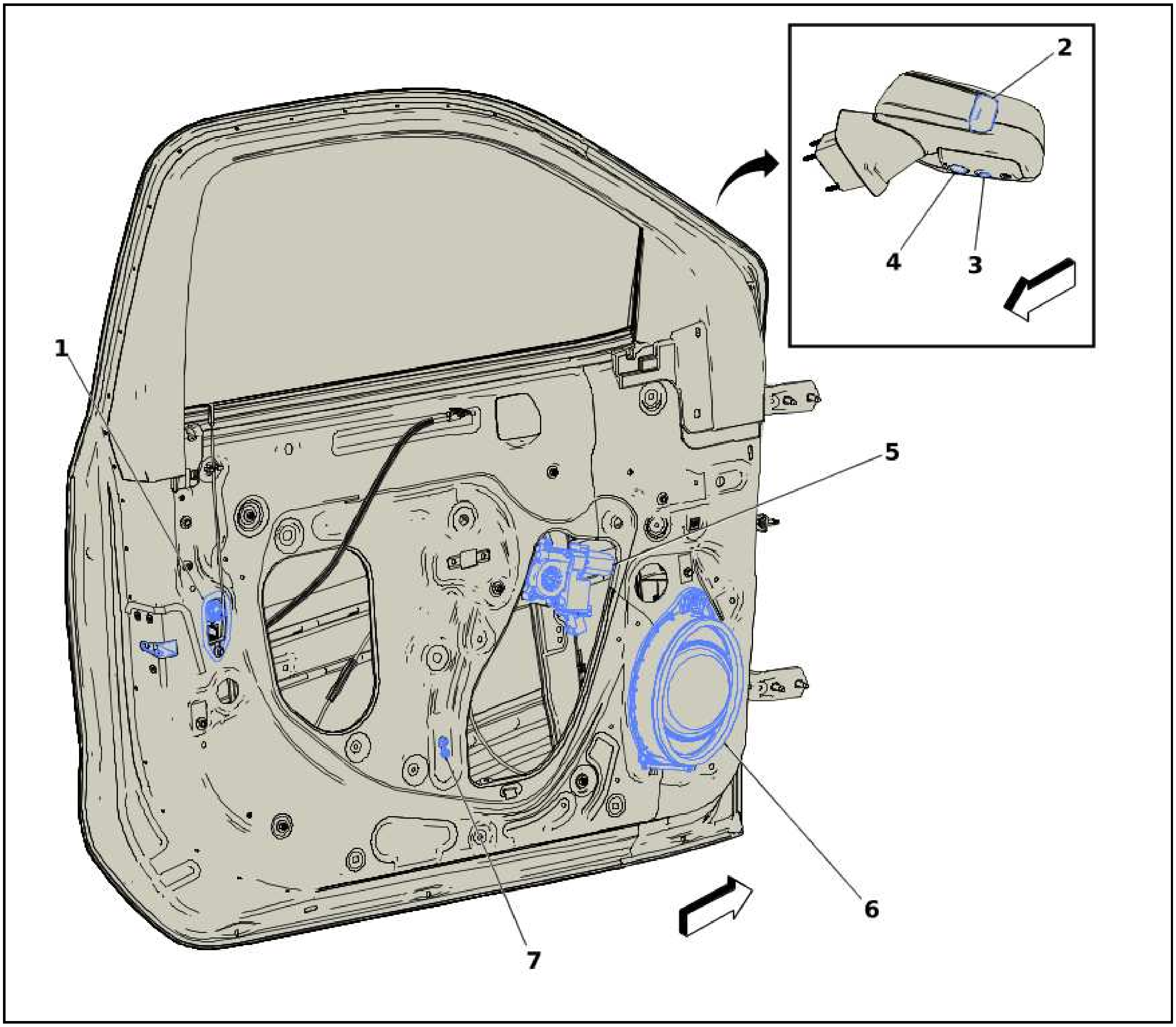
(9) A10 Inside Rearview Mirror

(10) B160 Windshield Temperature and Inside Moisture Sensor

(11) R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)

Door Component Views

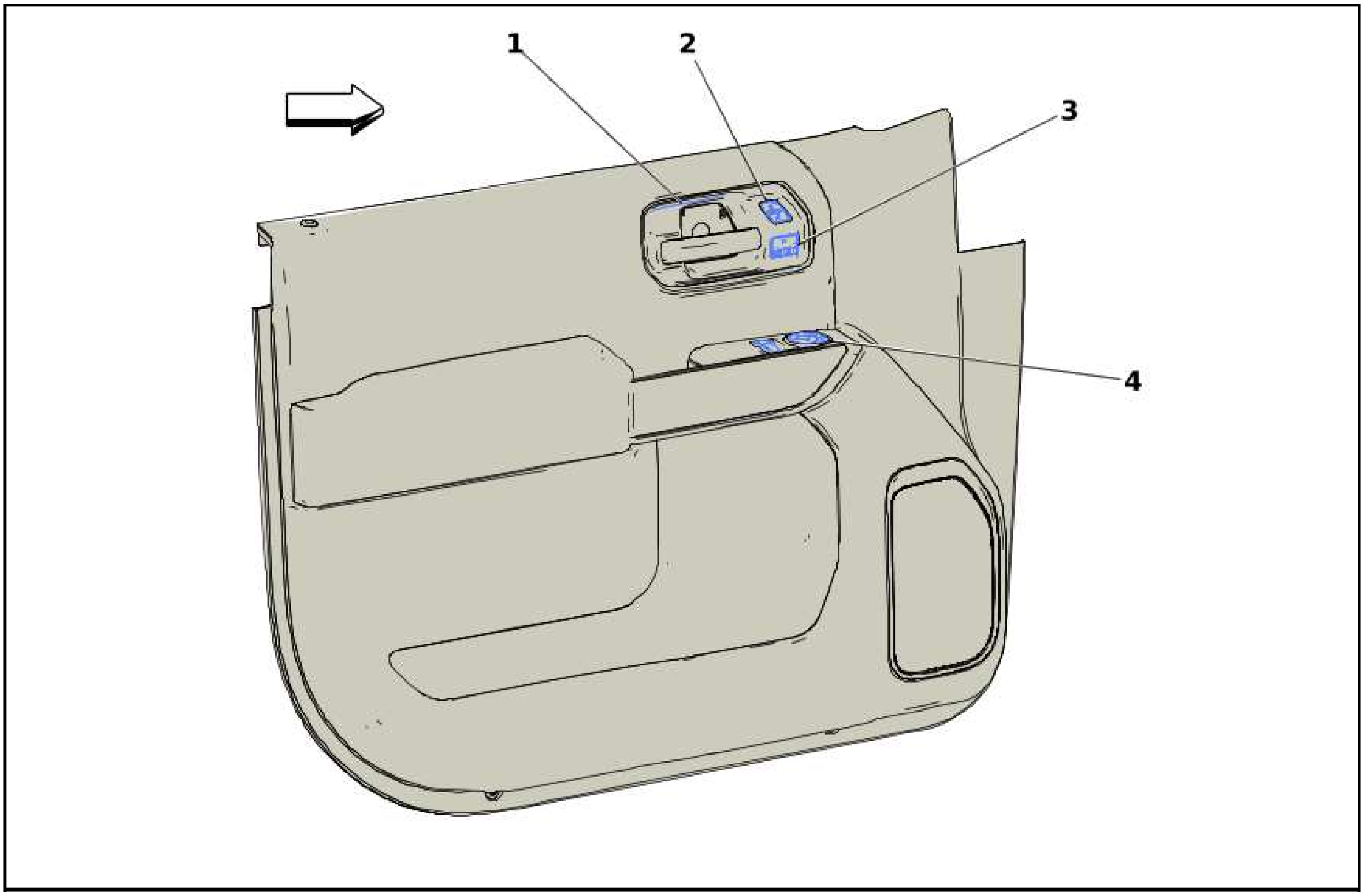
Driver Door Components



Items

(1)	A23D Door Latch Assembly - Driver
(2)	E90DF Exterior Flood Lamp - Driver Outside Rearview Mirror Forward (DEZ/DLF)
(3)	B225L Sideview Camera - Left (UVI/UV2)
(4)	E90DL Exterior Flood Lamp - Driver Outside Rearview Mirror Lower (DEZ)
(5)	M74D Window Motor - Driver
(6)	P19AG Speaker - Left Front Door
(7)	B63LF Side Impact Sensor - Left Front

Driver Door Trim Components

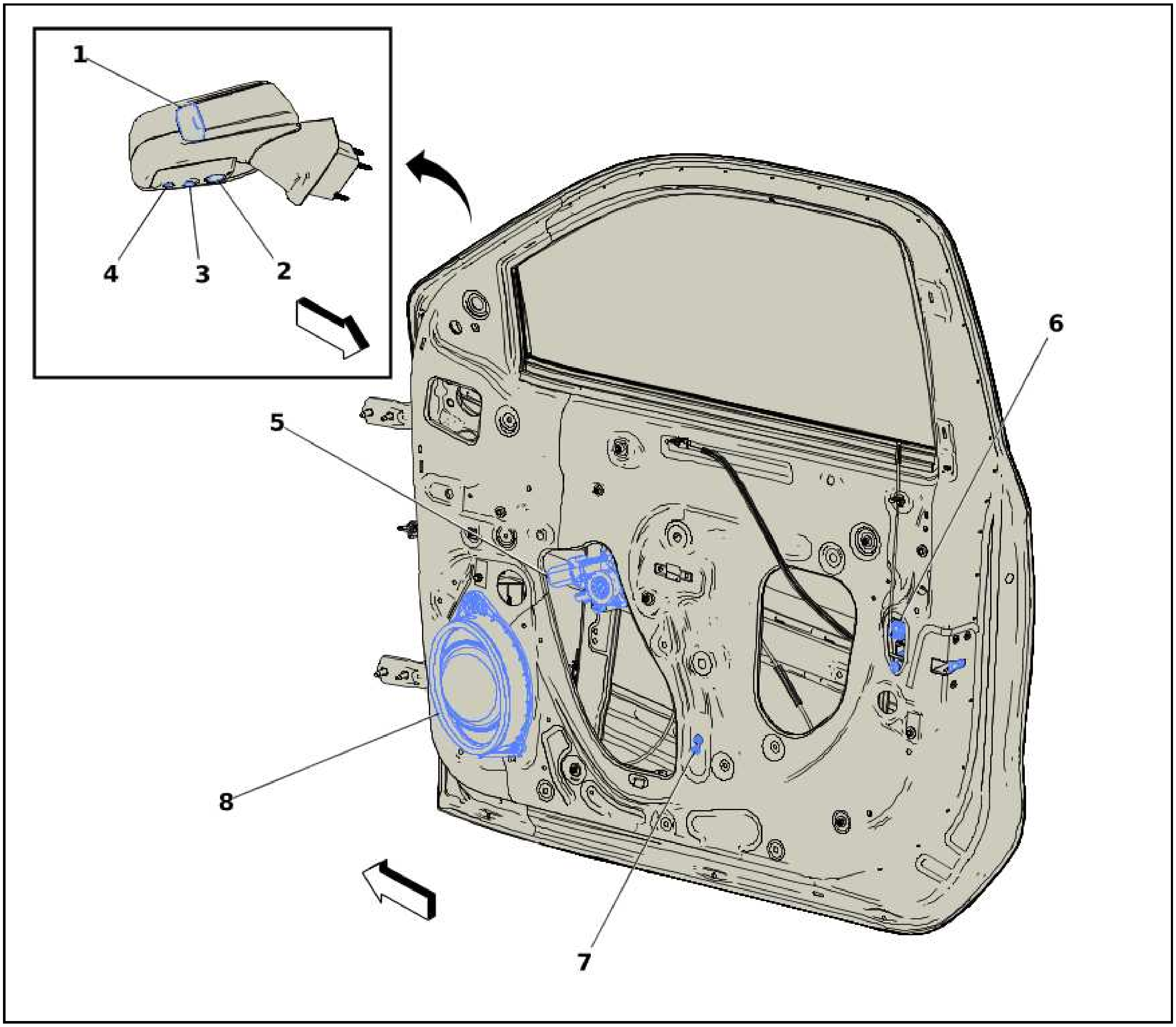


5002856

Items

(1)	E63D Flood Lamp - Driver Door Handle
(2)	S13D Door Lock Switch - Driver
(3)	S47D Seat Memory Switch - Driver
(4)	S146 Window/Outside Rearview Mirror Switch - Driver

Passenger Door Components

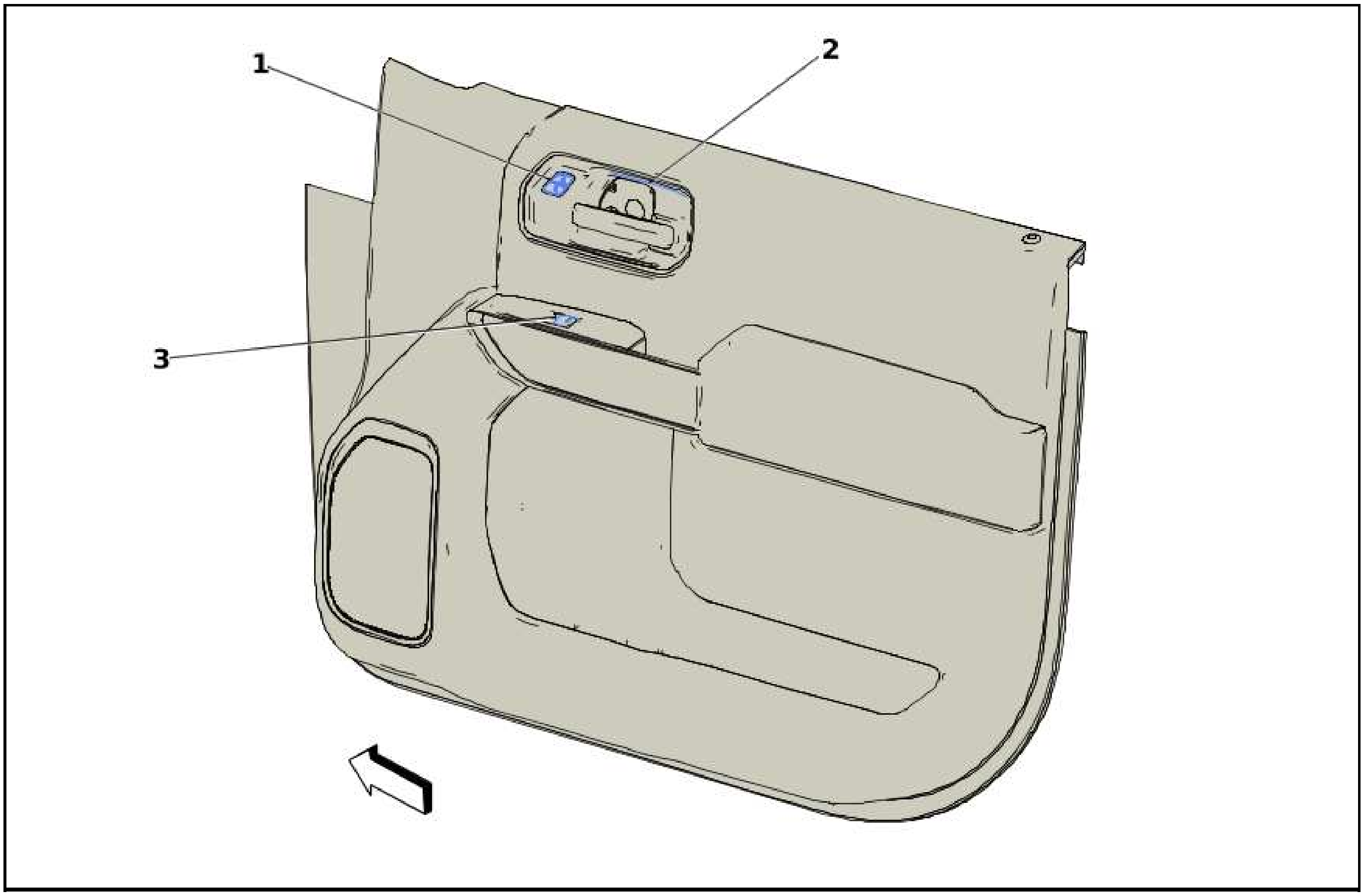


5002857

Items

(1)	E90PF Exterior Flood Lamp - Passenger Outside Rearview Mirror Forward (DEZ/DLF)
(2)	E90PL Exterior Flood Lamp - Passenger Outside Rearview Mirror Lower (DEZ)
(3)	B225R Sideview Camera - Right (UVI/UV2)
(4)	B9 Ambient Air Temperature Sensor
(5)	M74P Window Motor - Passenger
(6)	A23P Door Latch Assembly - Passenger
(7)	B63RF Side Impact Sensor - Right Front
(8)	P19AH Speaker - Right Front Door

Passenger Door Trim Components



5002858

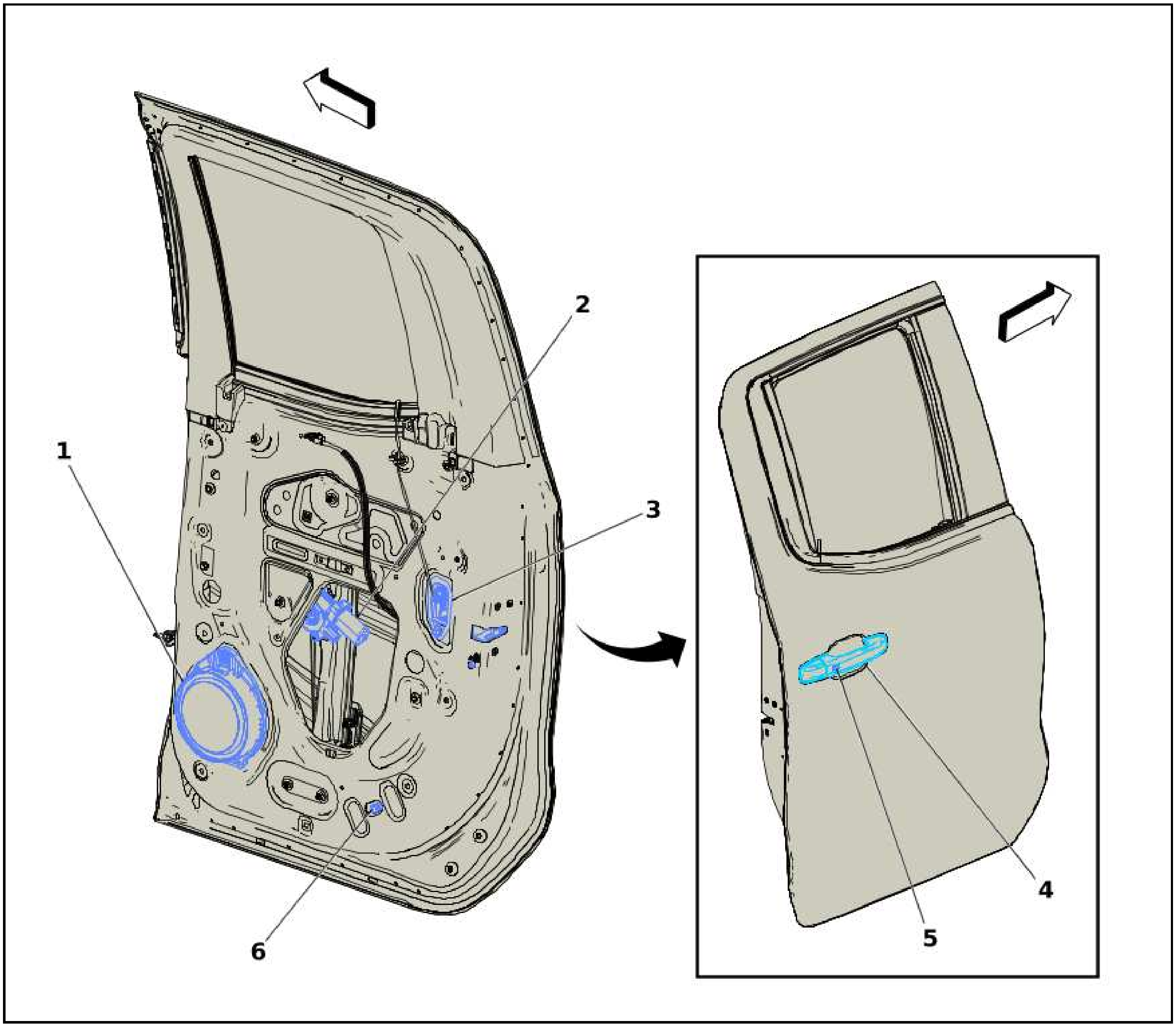
Items

(1) S13P Door Lock Switch - Passenger

(2) E63P Flood Lamp - Passenger Door Handle

(3) S79P Window Switch - Passenger

Left Rear Door Components (Extended Cab/Crew Cab)



5034751

Items

(1) P19AM Speaker - Right Rear Door

(2) M74RR Window Motor - Right Rear (Extended Cab/Crew Cab)

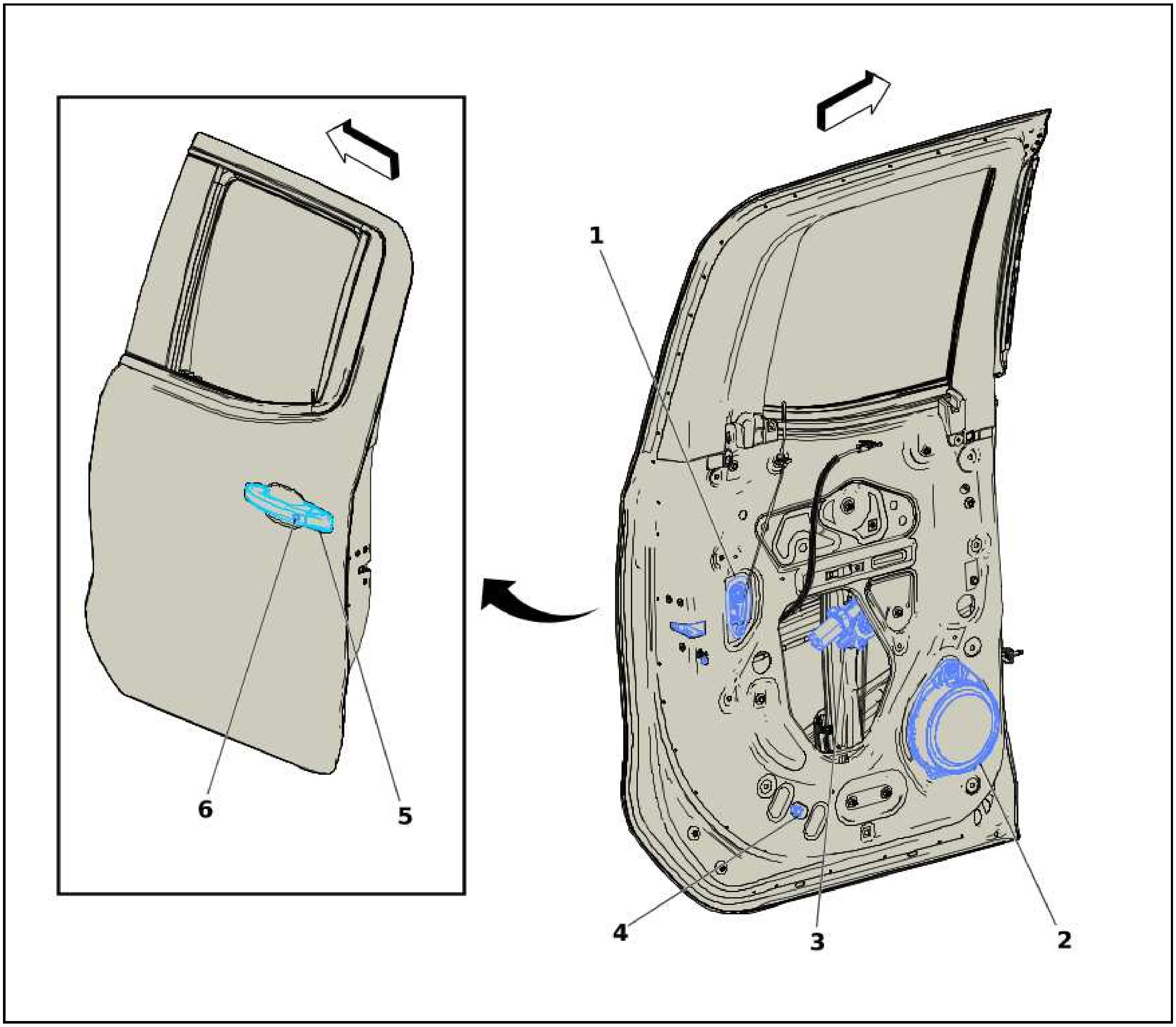
(3) A23RR Door Latch Assembly - Right Rear (Extended Cab/Crew Cab)

(4) A24RR Door Handle Assembly - Right Rear Exterior (Extended Cab/Crew Cab)

(5) B27RR Door Handle Switch - Right Rear Exterior (Extended Cab/Crew Cab)

(6) B63RR Side Impact Sensor - Right Rear (Extended Cab/Crew Cab)

Right Rear Door Components (Extended Cab/Crew Cab)

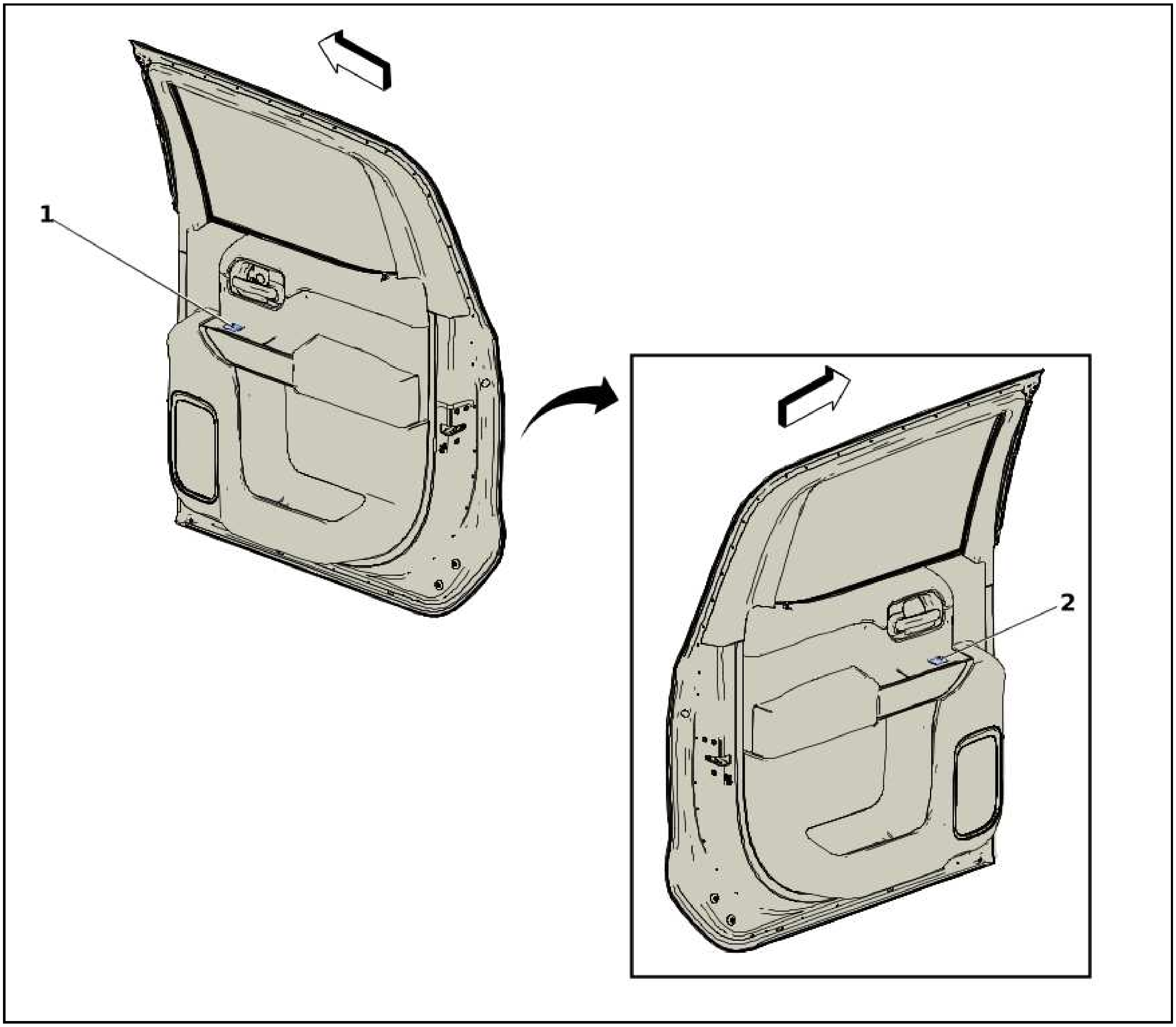


5034753

Items

- (1) A23LR Door Latch Assembly - Left Rear (Extended Cab/Crew Cab)
- (2) P19AL Speaker - Left Rear Door
- (3) S79LR Window Switch - Left Rear
- (4) B63LR Side Impact Sensor - Left Rear (Extended Cab/Crew Cab)
- (5) A24LR Door Handle Assembly - Left Rear Exterior (Extended Cab/Crew Cab)
- (6) B27LR Door Handle Switch - Left Rear Exterior (Extended Cab/Crew Cab)

Rear Door Trim Components (Extended Cab/Crew Cab)



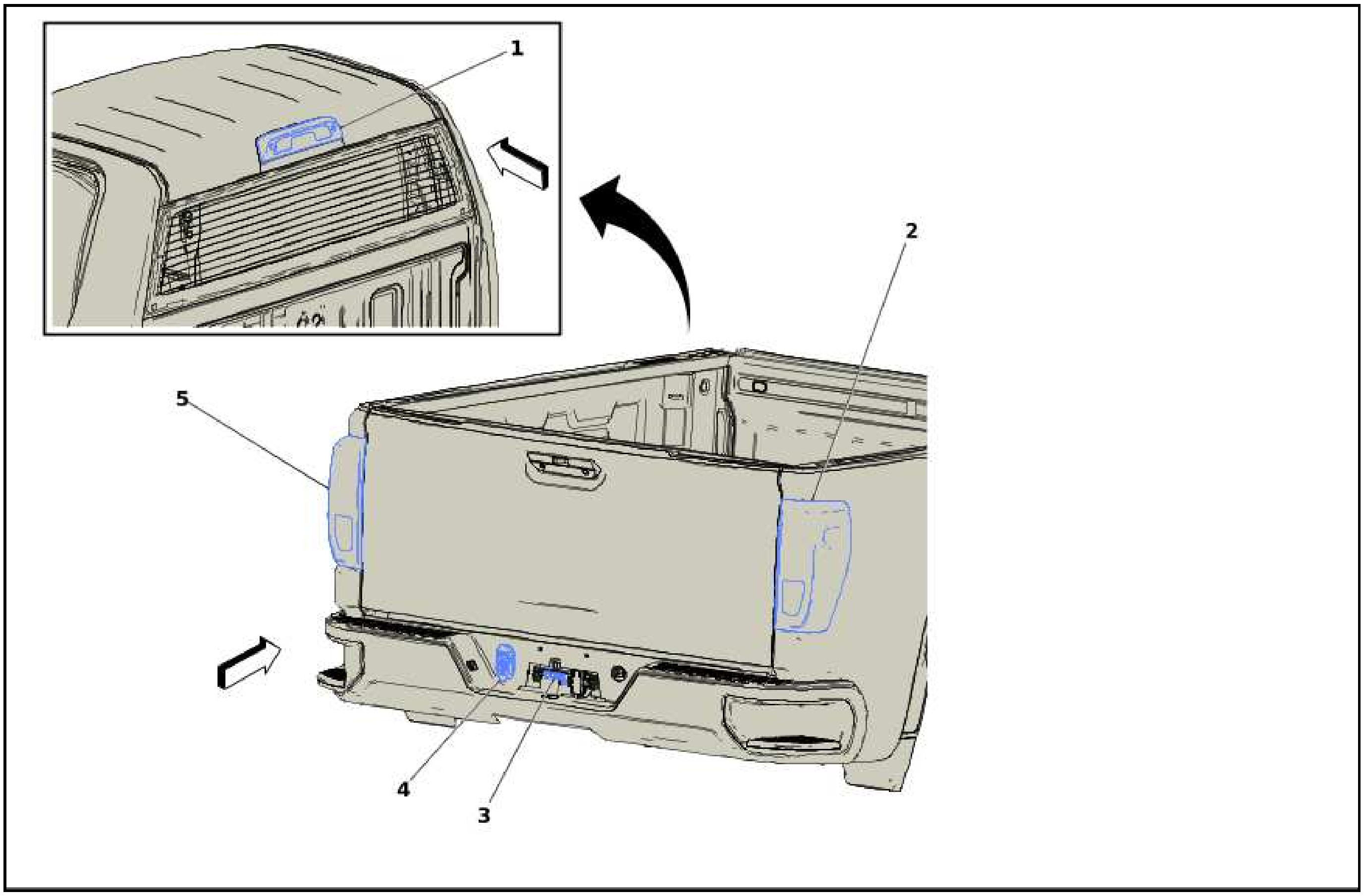
5034754

Items

(1)	S79RR Window Switch - Right Rear
(2)	S79LR Window Switch - Left Rear

Luggage Compartment/Rear of Vehicle Component Views

Rear of Vehicle Components

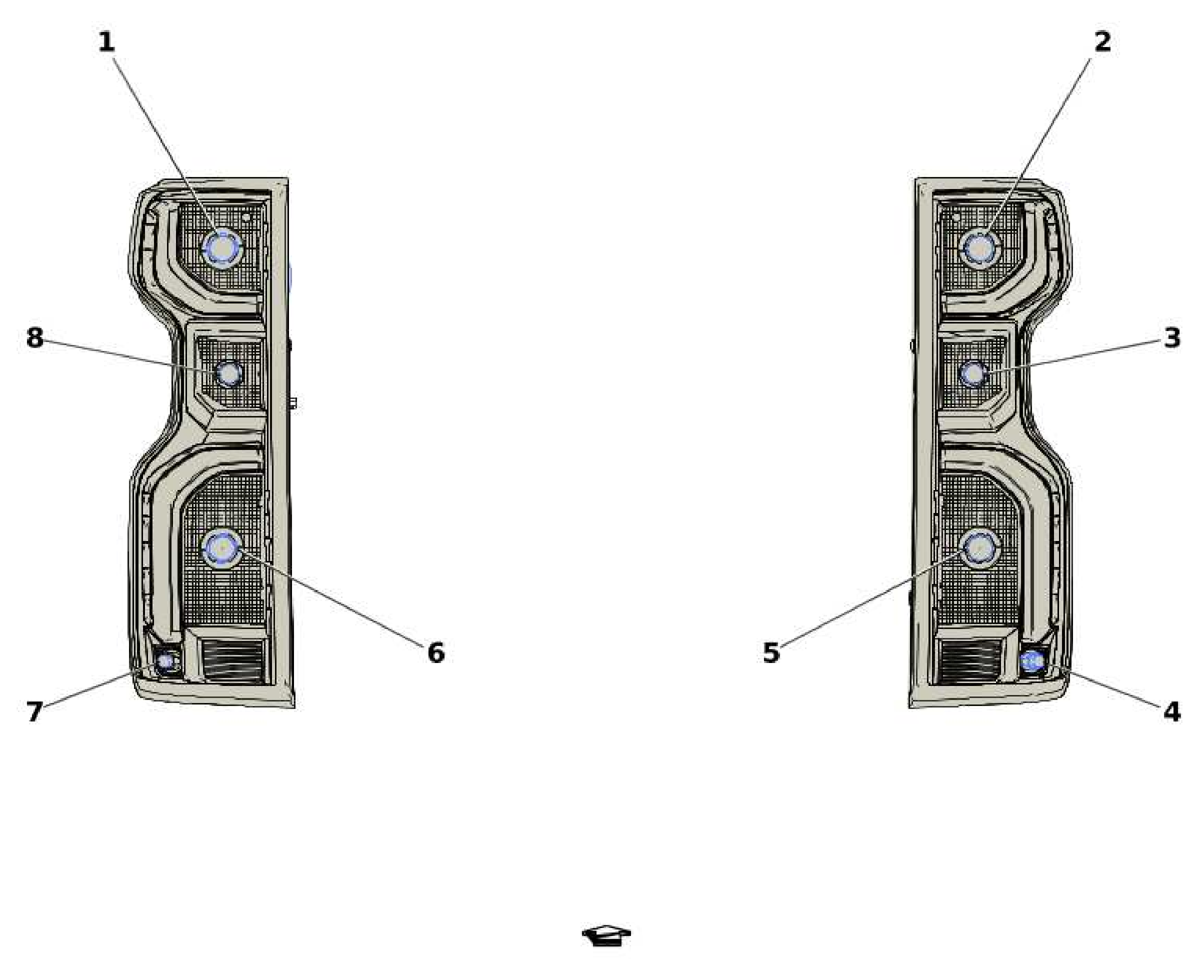


5002860

Items

(1)	E6 Center High Mounted Stop Lamp
(2)	E42R Tail Lamp Assembly - Right
(3)	T10E Keyless Entry Antenna - Rear Compartment (BTM)
(4)	X88 Trailer Connector
(5)	E42L Tail Lamp Assembly - Left

Tail Lamp Assemblies - Base Level (X88)

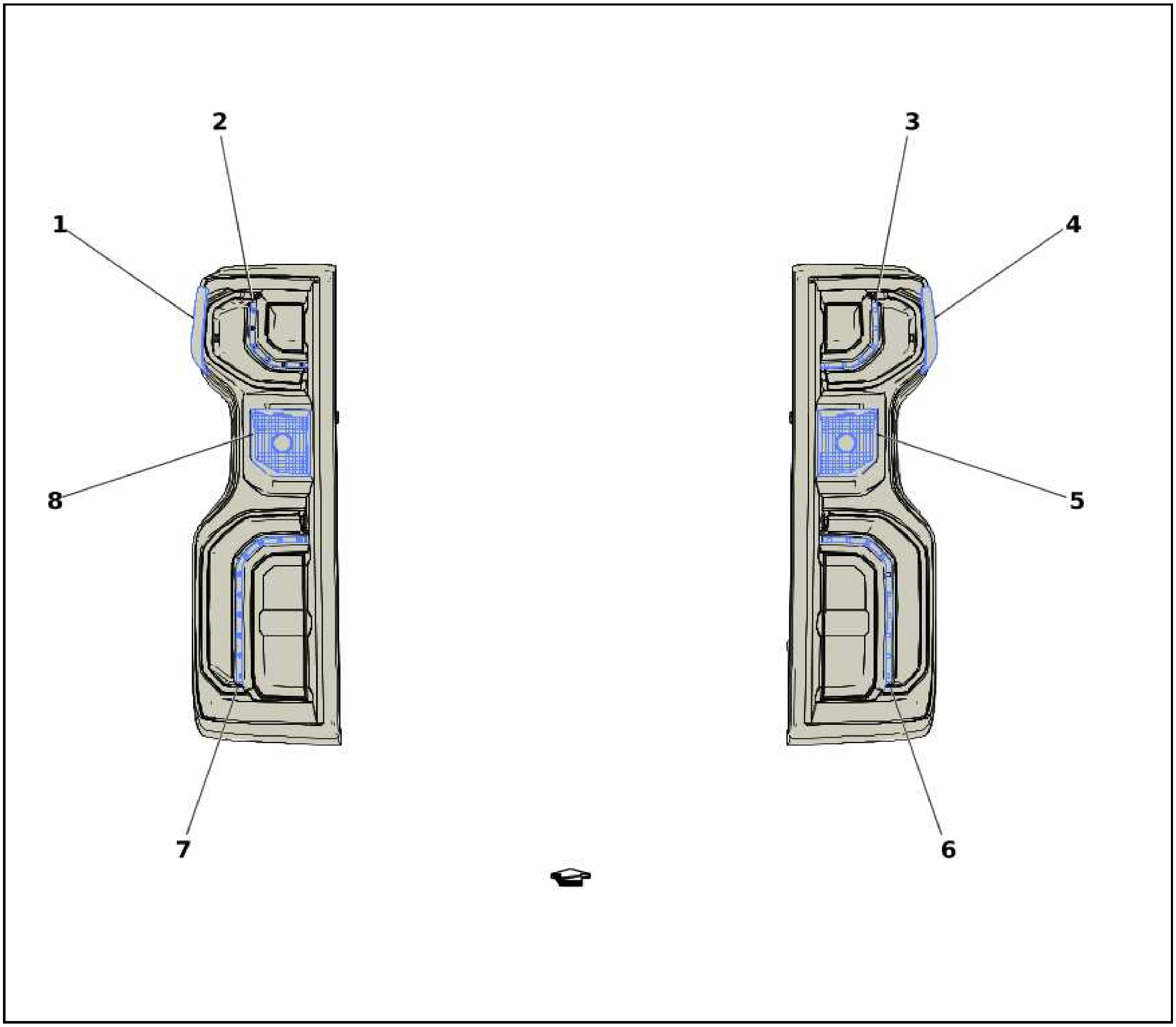


5124979

Items

(1)	E5AG Tail/Stop and Turn Signal Lamp - Left Upper (X88+Base)
(2)	E5AH Tail/Stop and Turn Signal Lamp - Right Upper (X88+Base)
(3)	E5B Backup Lamp - Right
(4)	E2RR Side Marker Lamp - Right Rear
(5)	E5V Tail/Stop and Turn Signal Lamp - Right Lower (X88+Base)
(6)	E5U Tail/Stop and Turn Signal Lamp - Left Lower (X88+Base)
(7)	E2LR Side Marker Lamp - Left Rear
(8)	E5A Backup Lamp - Left

Tail Lamp Assemblies - Up Level (X88)

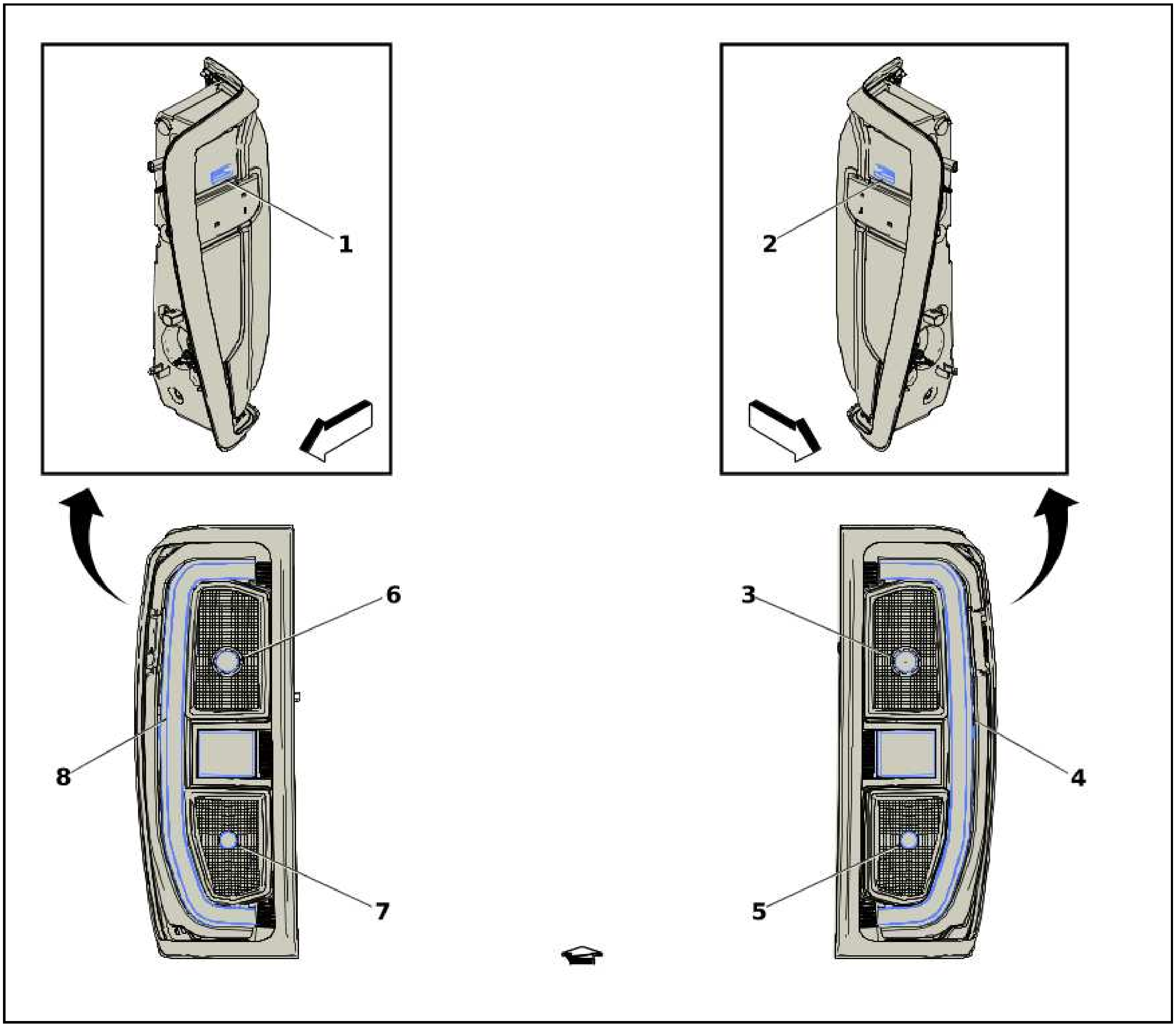


5124980

Items

(1)	E2LR Side Marker Lamp - Left Rear
(2)	E5AG Tail/Stop and Turn Signal Lamp - Left Upper (X88+Base)
(3)	E5AH Tail/Stop and Turn Signal Lamp - Right Upper (X88+Base)
(4)	E2RR Side Marker Lamp - Right Rear
(5)	E5B Backup Lamp - Right
(6)	E5V Tail/Stop and Turn Signal Lamp - Right Lower (X88+Base)
(7)	E5U Tail/Stop and Turn Signal Lamp - Left Lower (X88+Base)
(8)	E5A Backup Lamp - Left

Tail Lamp Assemblies - Base Level (Z88)

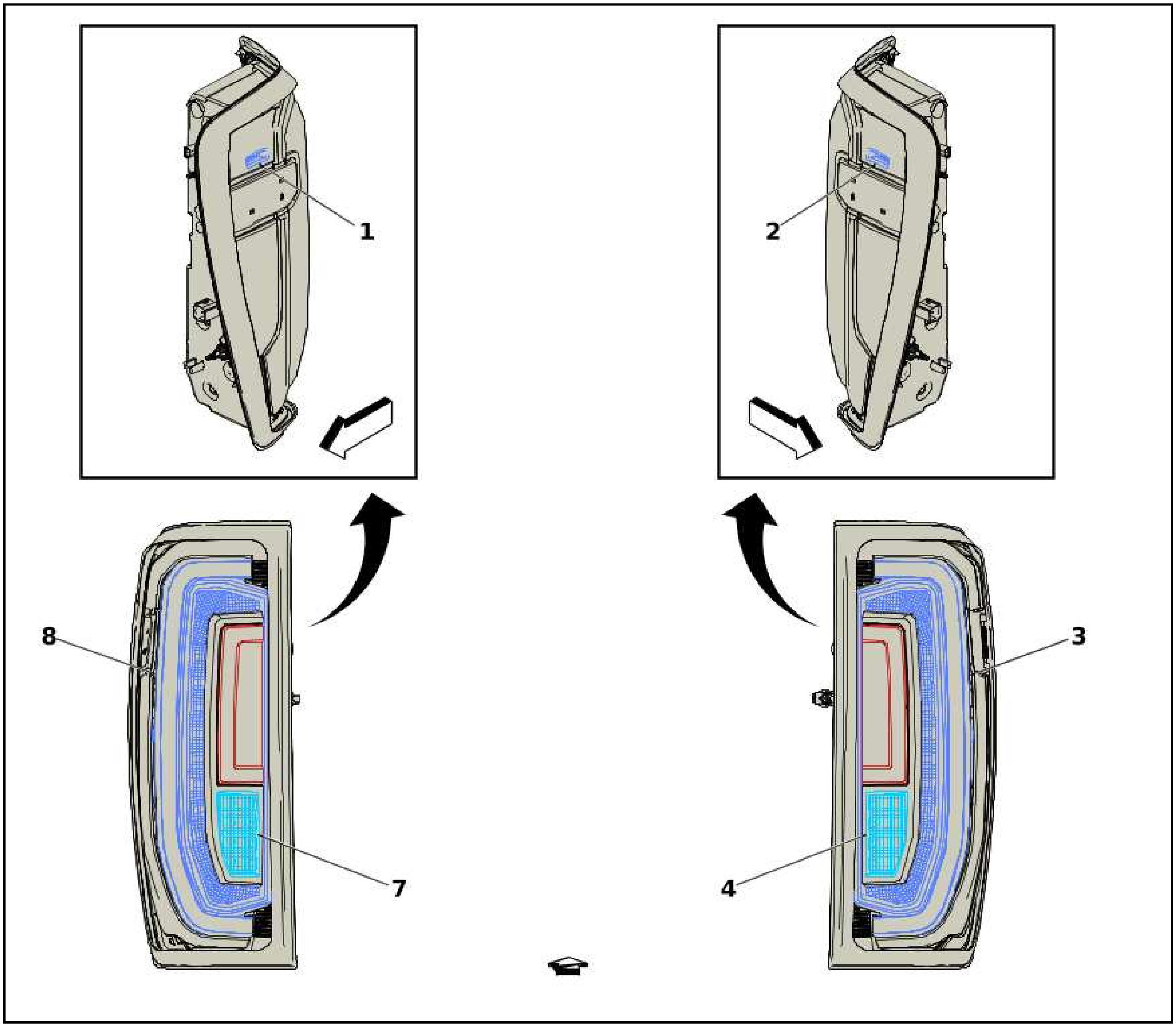


5124981

Items

(1)	E2LR Side Marker Lamp - Left Rear
(2)	E2RR Side Marker Lamp - Right Rear
(3)	E5AN Stop/Turn Signal Lamp - Right
(4)	E5F Tail Lamp - Right
(5)	E5B Backup Lamp - Right
(6)	E5AM Stop/Turn Signal Lamp - Left
(7)	E5A Backup Lamp - Left
(8)	E5E Tail Lamp - Left

Tail Lamp Assemblies - Up Level (Z88)

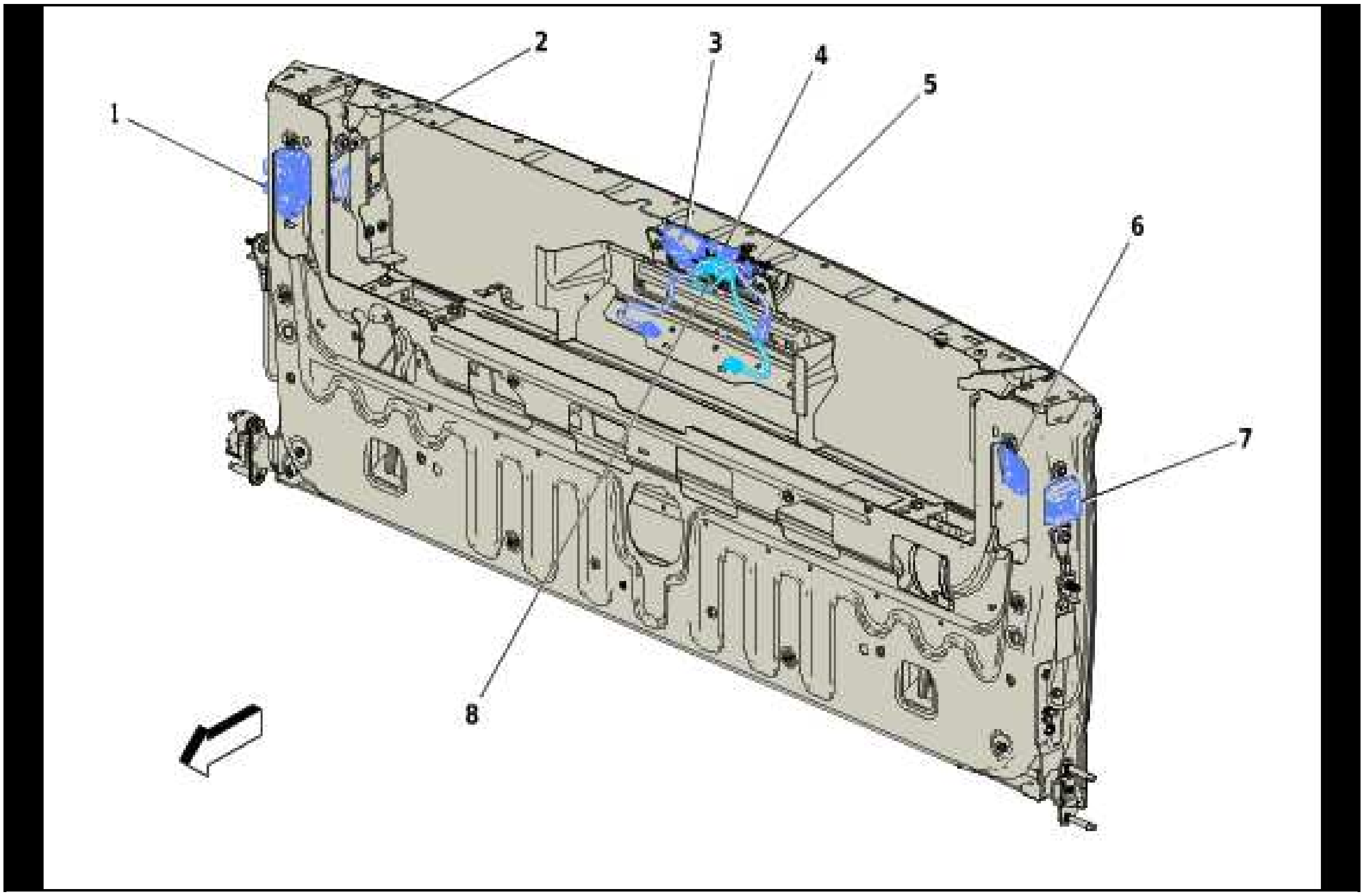


5124982

Items

(1)	E2LR Side Marker Lamp - Left Rear
(2)	E2RR Side Marker Lamp - Right Rear
(3)	E5AN Stop/Turn Signal Lamp - Right
(4)	E5B Backup Lamp - Right
(7)	E5A Backup Lamp - Left
(8)	E5AM Stop/Turn Signal Lamp - Left

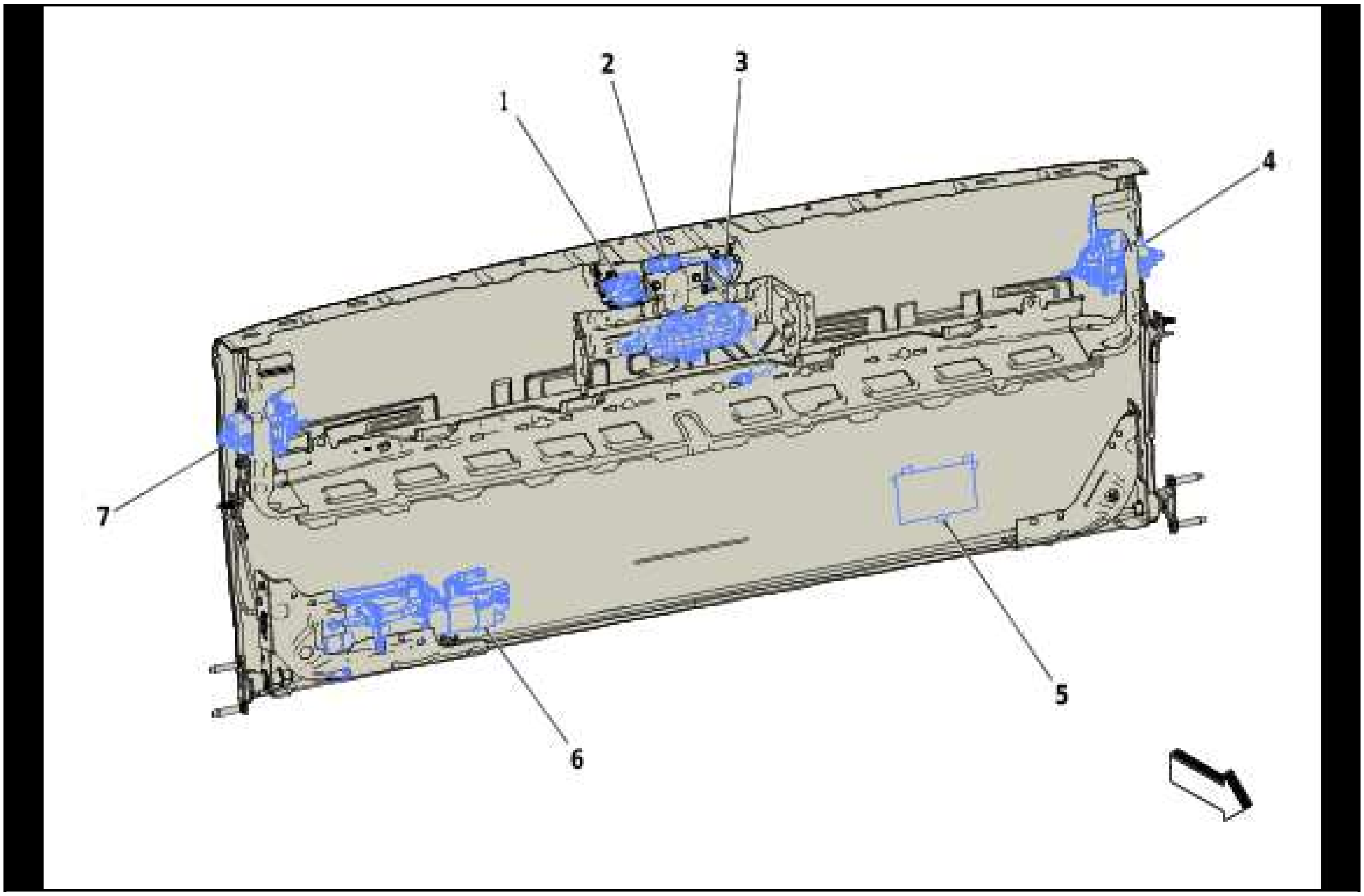
Endgate Components (QK2)



Items

(1)	A99R Pickup Box Endgate Latch - Right (QK2/QT6)
(2)	A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)
(3)	E8L Liftgate Courtesy Lamp (QT5/QT6)
(4)	S159E Pickup Box Endgate Control Switch - Exterior (QT6/QK2)
(5)	B87 Rearview Camera (UVB/UVC/UV2/UVI)
(6)	A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)
(7)	A99L Pickup Box Endgate Latch - Left (QK2/QT6)
(8)	S157 Pickup Box Endgate Unlatch Switch (QT5)

Endgate Components (QT6)

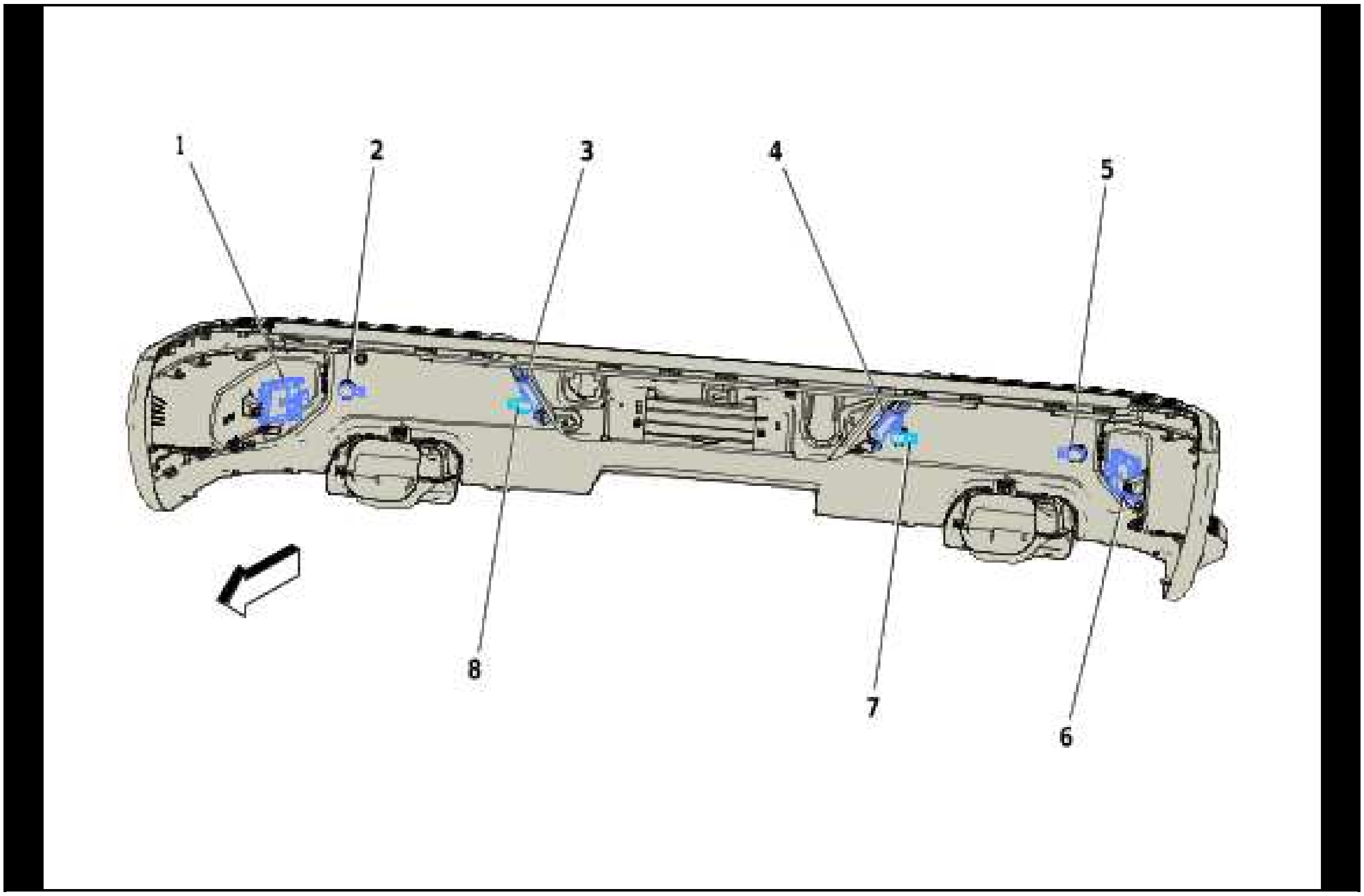


5023370

Items

(1)	E8L Liftgate Courtesy Lamp (QT5/QT6)
(2)	S159E Pickup Box Endgate Control Switch - Exterior (QT6/QK2)
(3)	B87 Rearview Camera (UVB/UVC/UV2/UVI)
(4)	A99L Pickup Box Endgate Latch - Left (QK2/QT6)
(5)	K194 Rear Gate Module (QT6)
(6)	M125 Pickup Box Endgate Power Assist Actuator (QT6)
(7)	A99R Pickup Box Endgate Latch - Right (QK2/QT6)

Rear Bumper Components



Items

(1) B218R Side Object Sensor Module - Right (UKC)

(2) B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)

(3) E7R License Plate Lamp - Right (E63)

(4) E7L License Plate Lamp - Left (E63)

(5) B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)

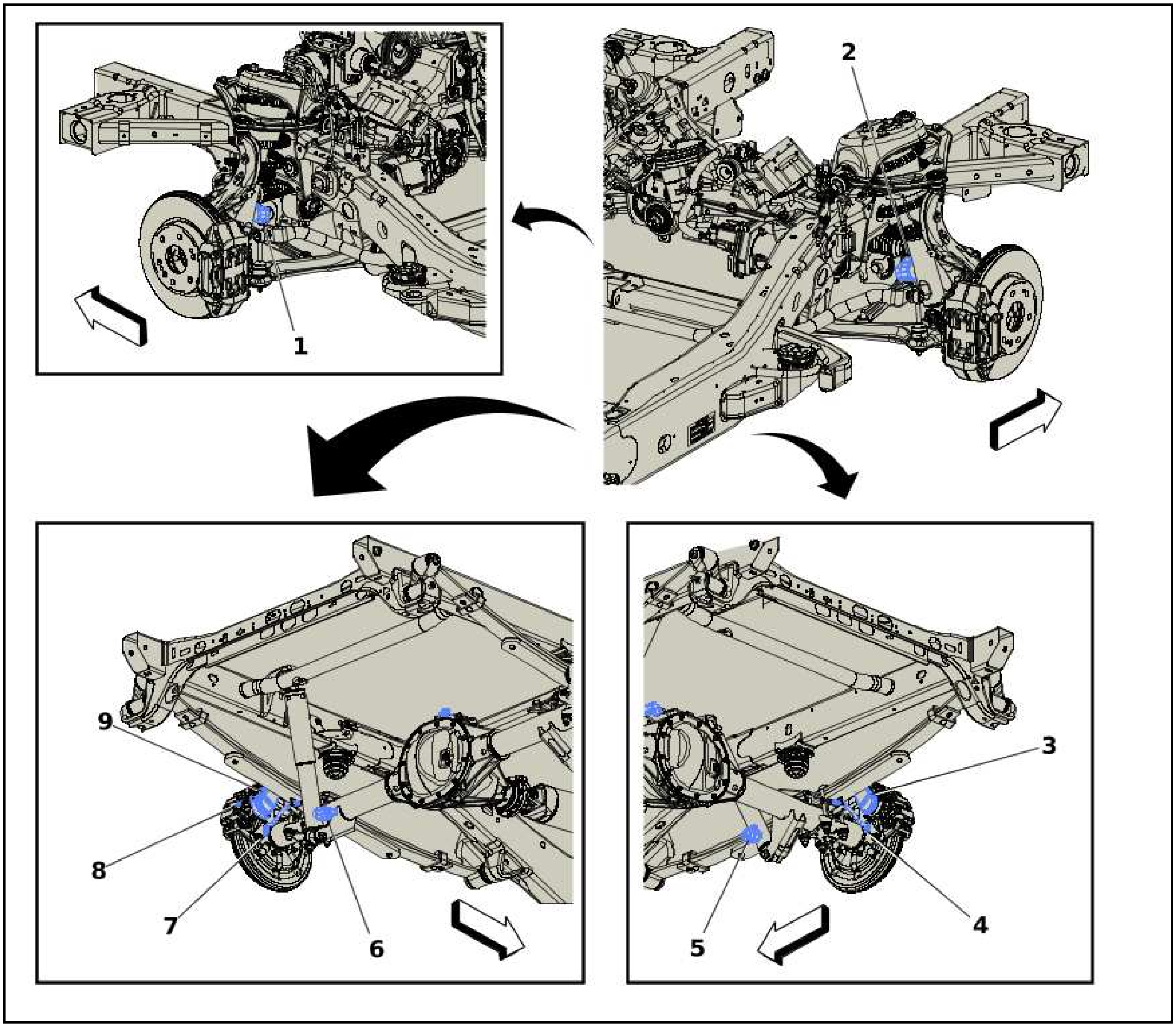
(6) B218L Side Object Sensor Module - Left (UKC)

(7) B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)

(8) B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)

Wheels/Vehicle Underbody Component Views

Brake and Suspension Components

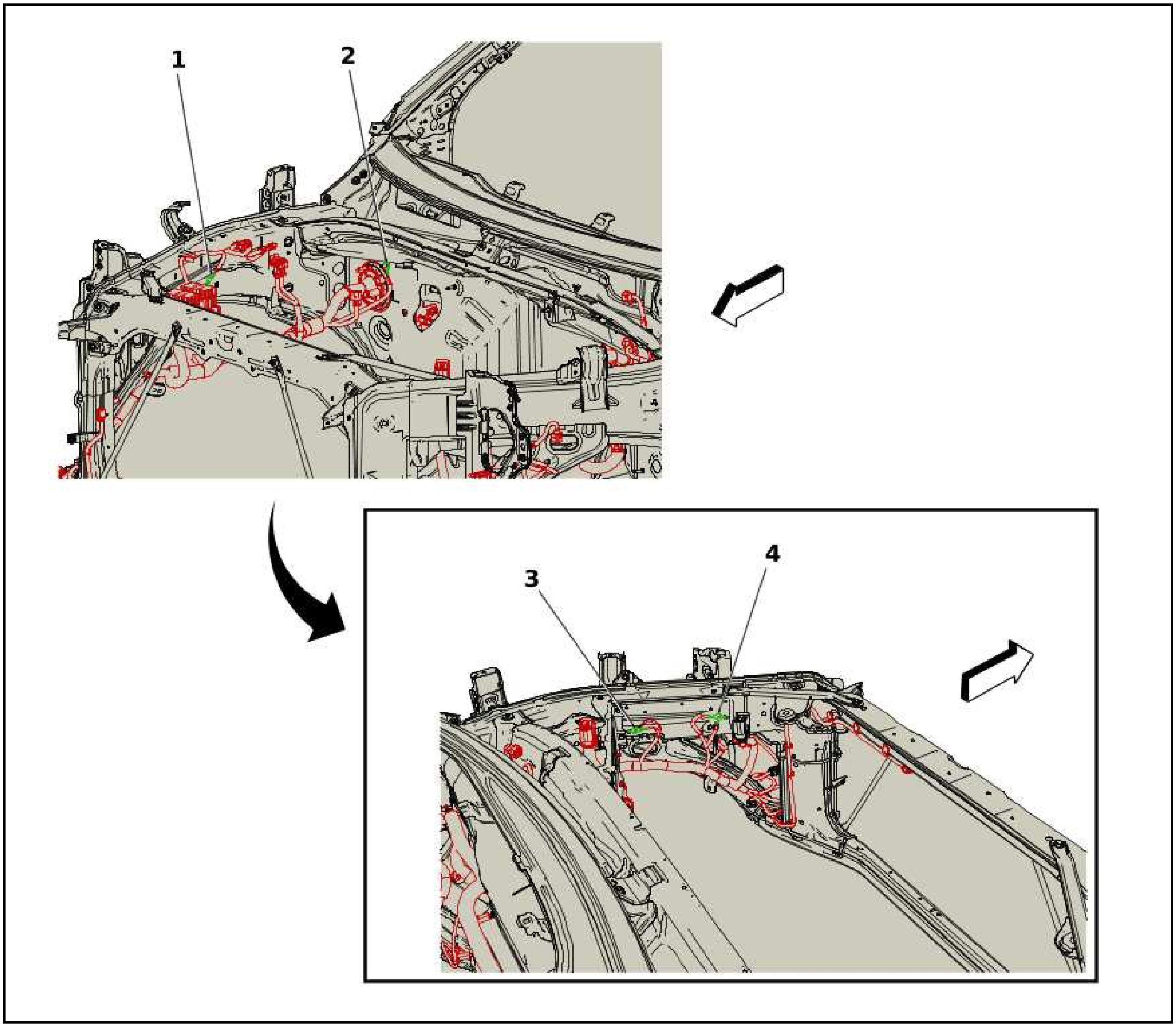


Items

(1)	Q37LF Shock Absorber Actuator - Left Front (Z45)
(2)	Q37RF Shock Absorber Actuator - Right Front (Z45)
(3)	M104R Park Brake Actuator - Right
(4)	B5RR Wheel Speed Sensor - Right Rear
(5)	Q37RR Shock Absorber Actuator - Right Rear (Z45)
(6)	Q37LR Shock Absorber Actuator - Left Rear (Z45)
(7)	B5LR Wheel Speed Sensor - Left Rear
(8)	B172LR Brake Pad Wear Sensor - Left Rear
(9)	M104L Park Brake Actuator - Left

Ground Views

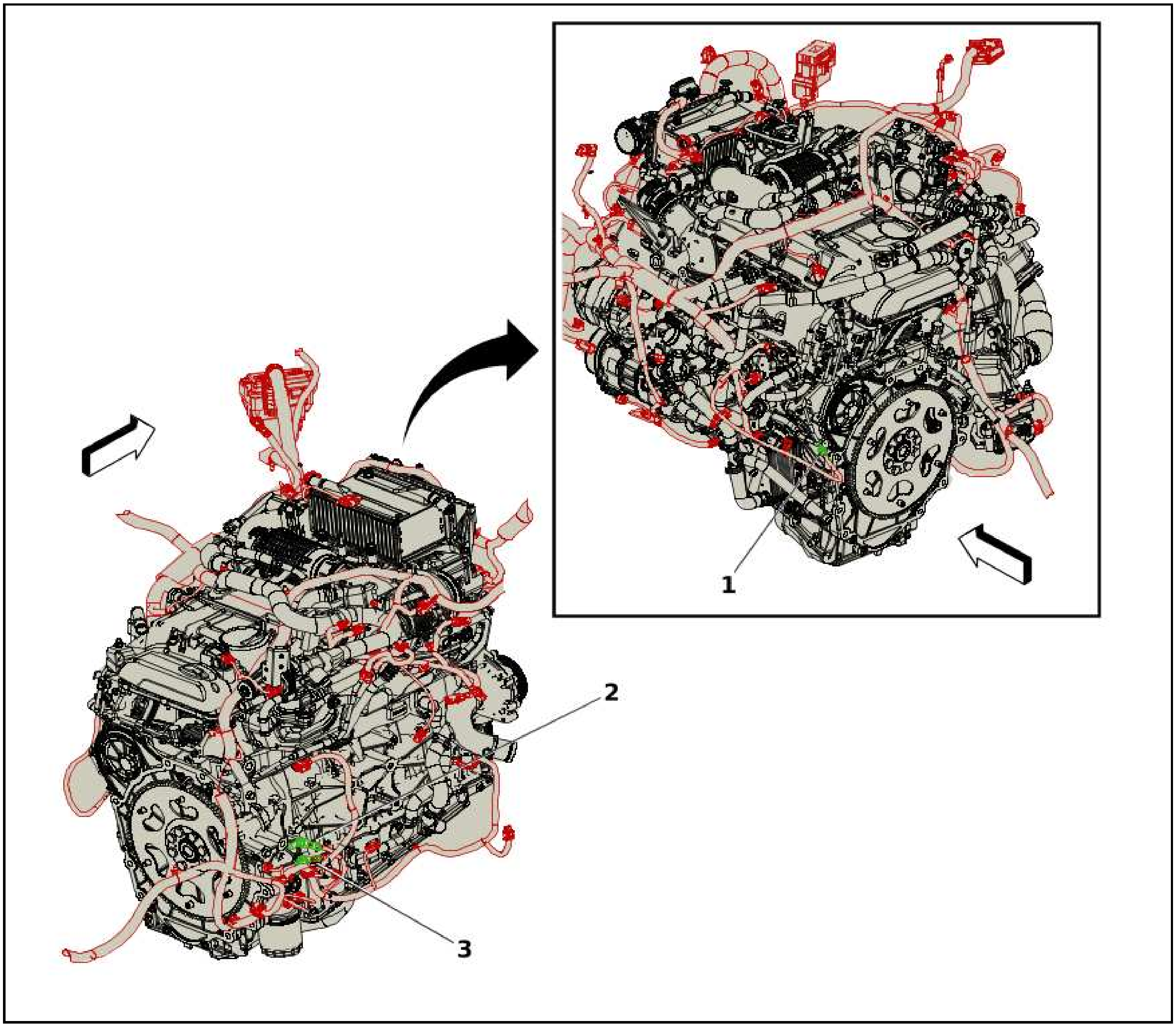
G110, G114, G120, and G128



Items

(1)	G120 Body Harness
(2)	G128 Body Harness
(3)	G110 Body Harness
(4)	G114 Body Harness

G115, G117, and G118 (LM2)

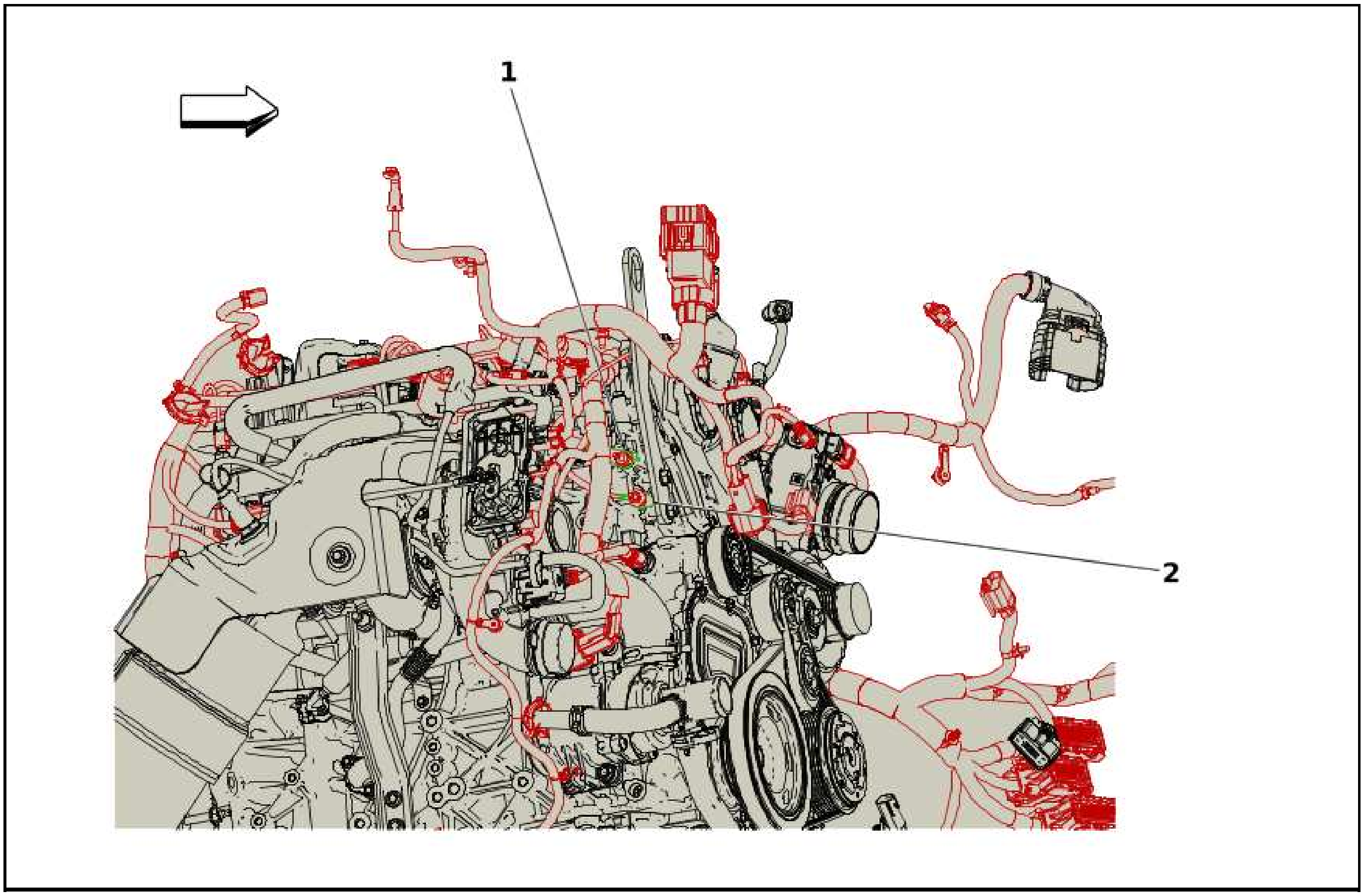


5034219

Items

(1)	G118 Engine Harness (LM2)
(2)	G117 Engine Harness
(3)	G115 Engine Harness

G115 and G121 (L3B)

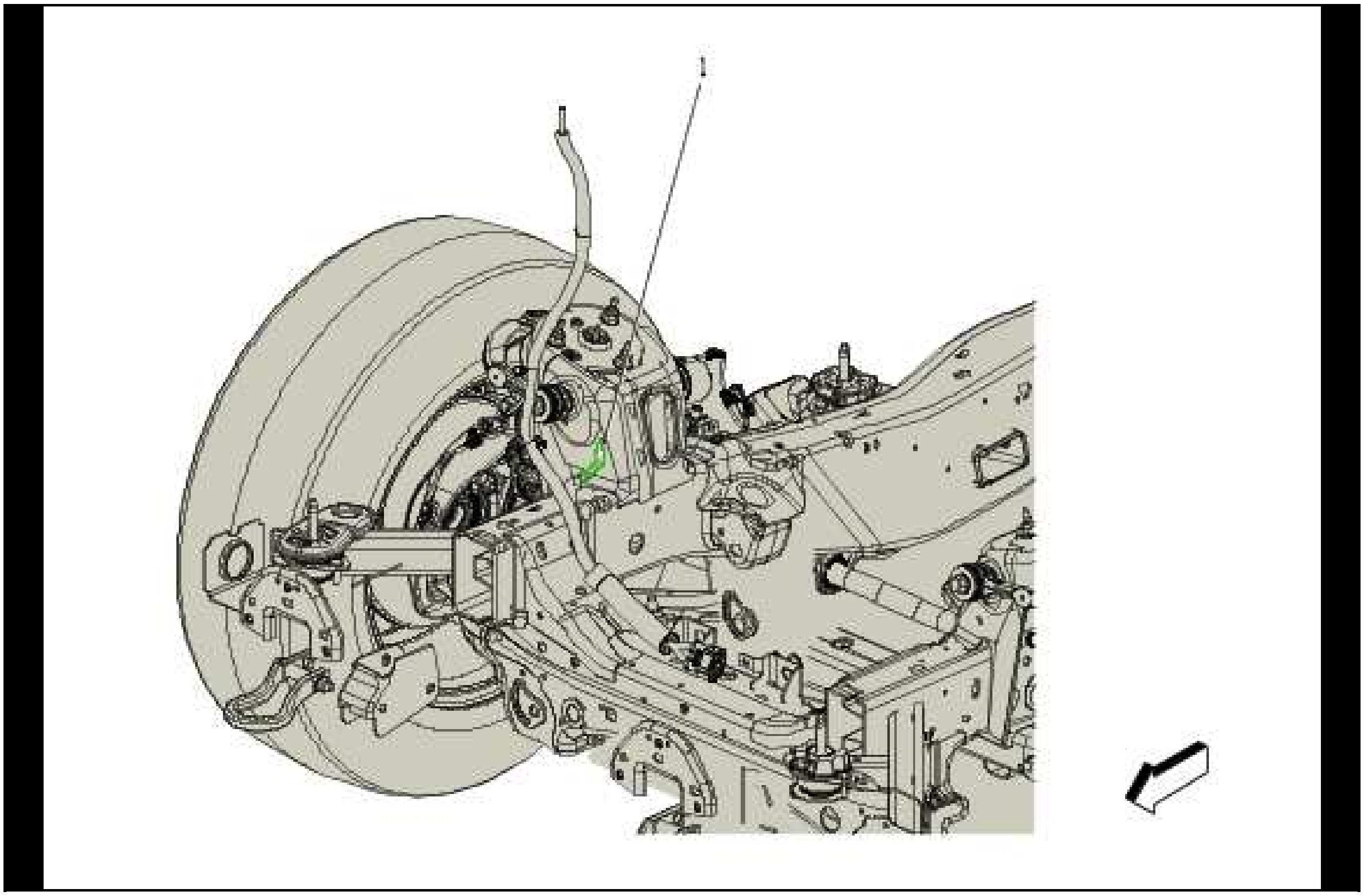


5034755

Items

(1)	G115 Engine Harness
(2)	G121 Engine Harness

G116

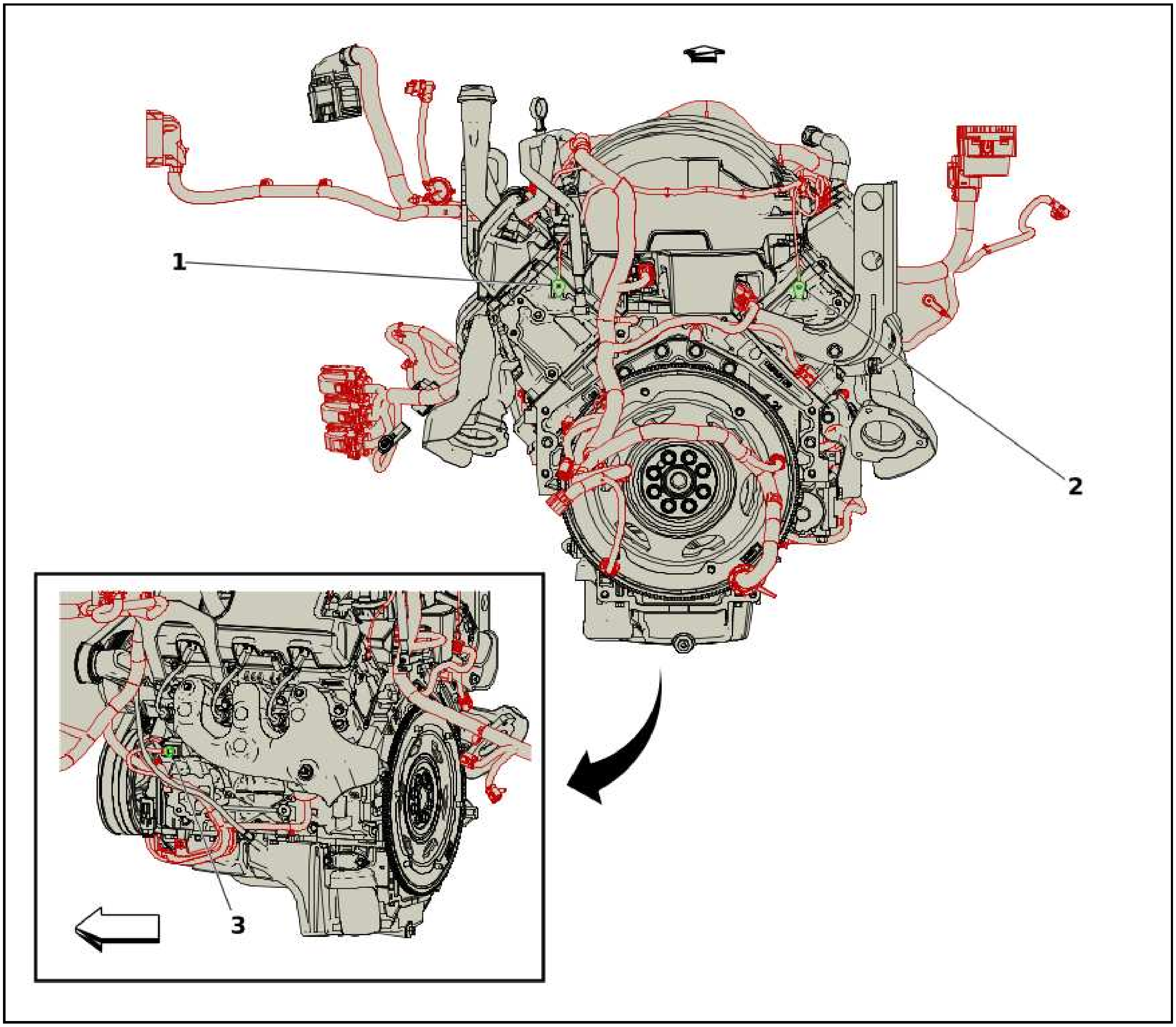


5593202

Items

(1)	G116 Power Steering Harness

G117, G121, and G122 (LV3)

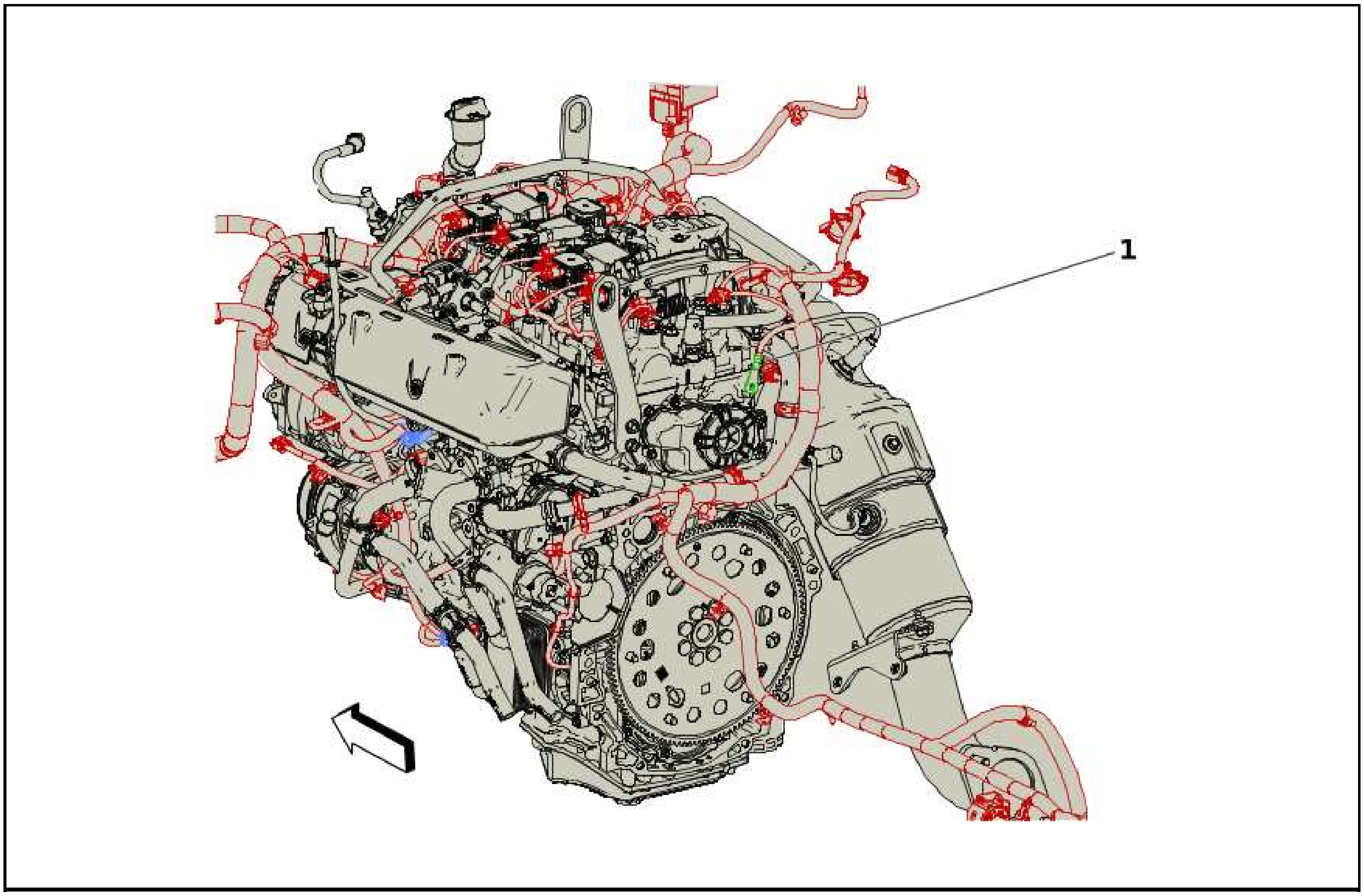


5002861

Items

(1)	G121 Engine Harness
(2)	G122 Engine Harness
(3)	G117 Engine Harness

G117 (L3B)

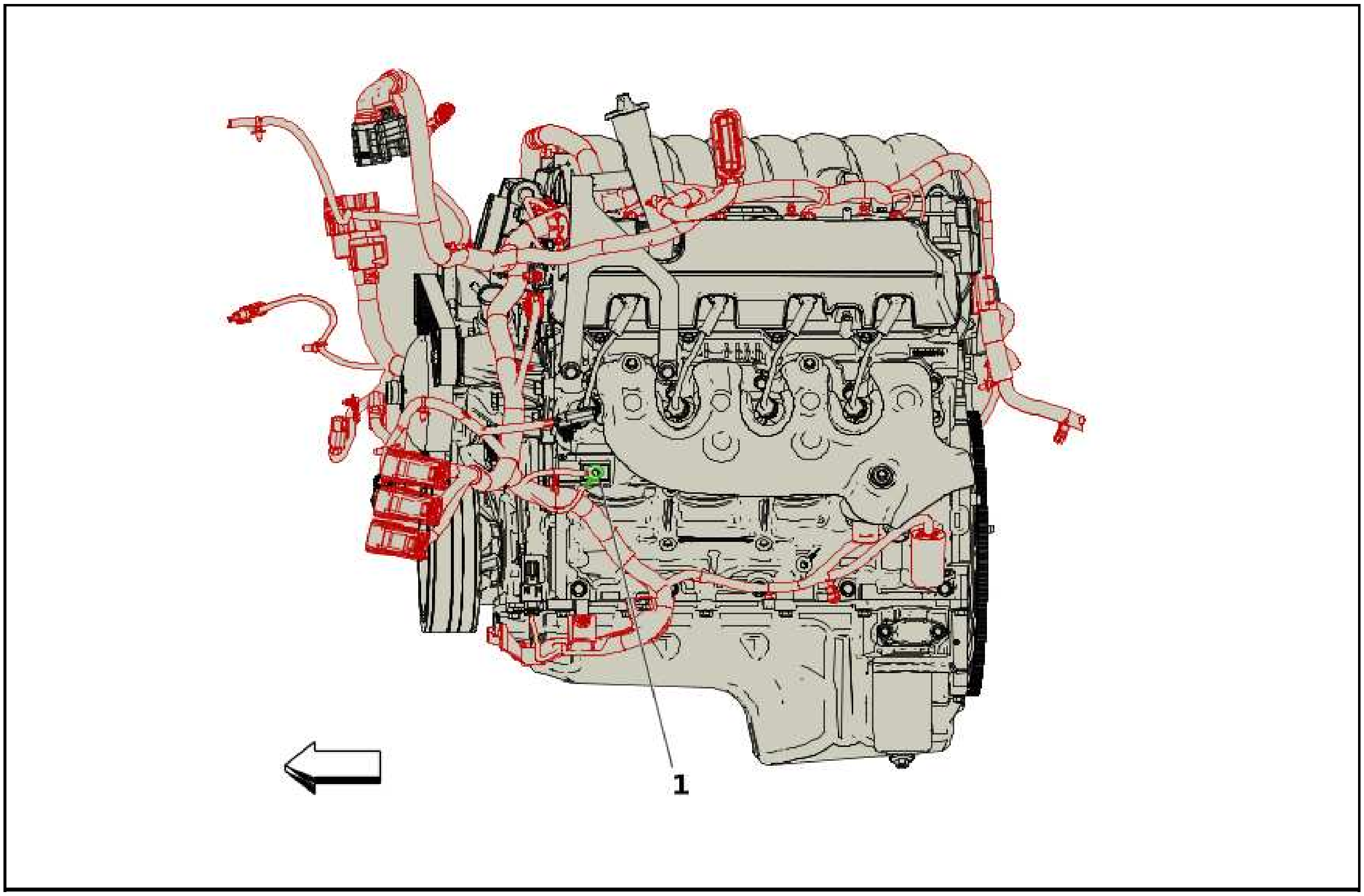


5034756

Items

(1) G117 Engine Harness

G117 (L82/L84/L87)

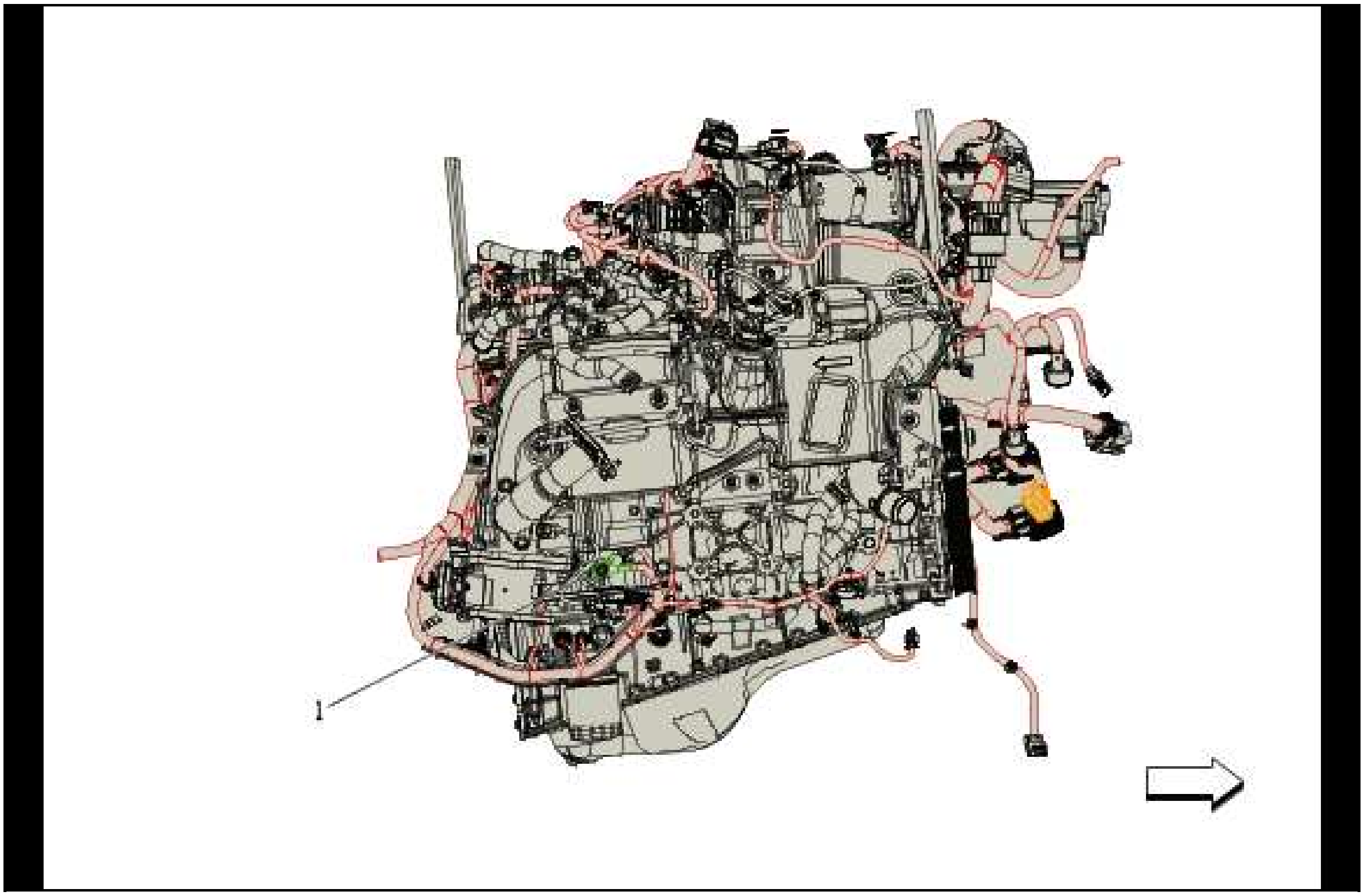


5034757

Items

(1)	G117 Engine Harness

G117 (LM2)

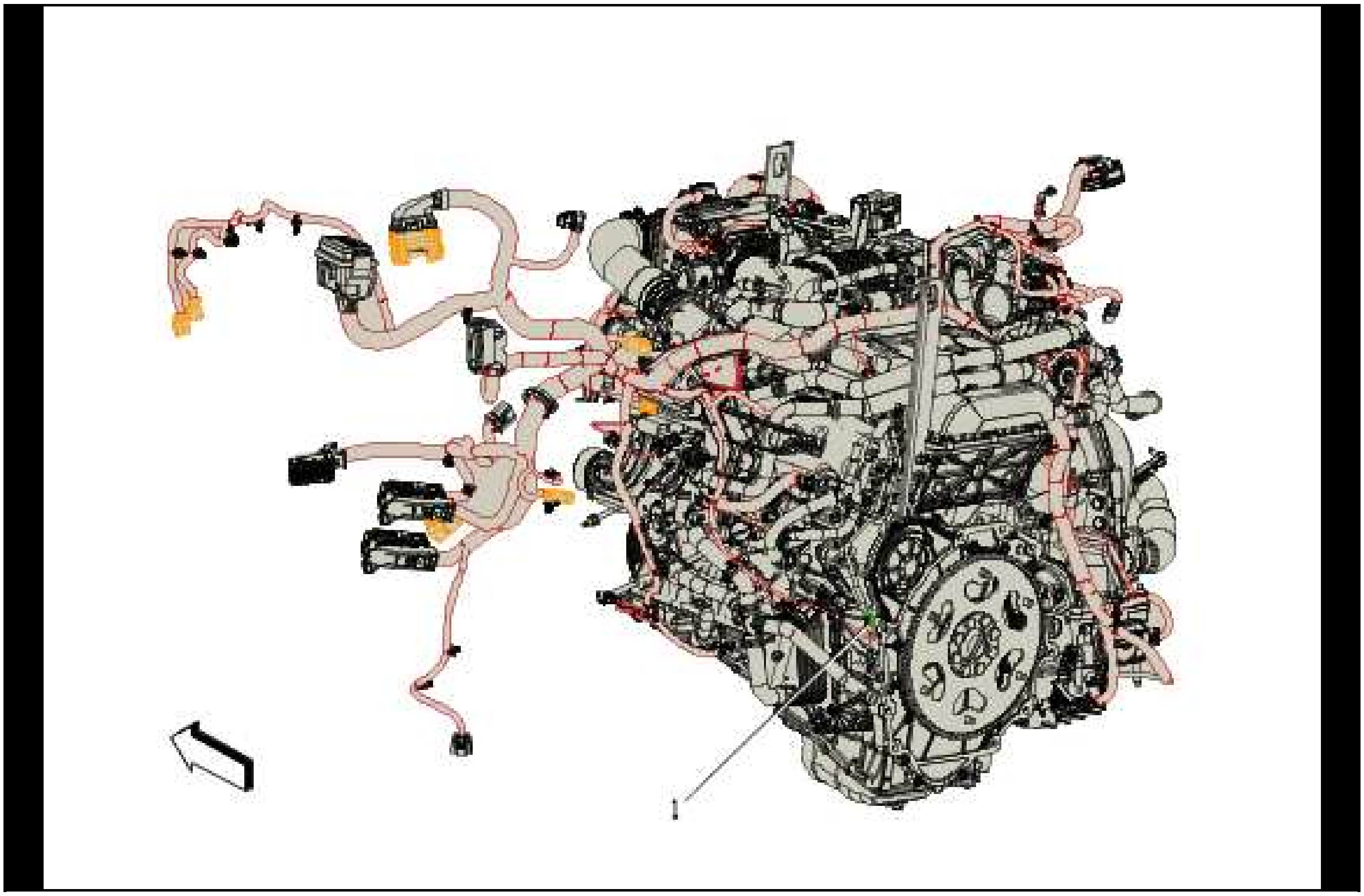


5593448

Items

(1)	G117 Engine Harness

G118 (LM2)

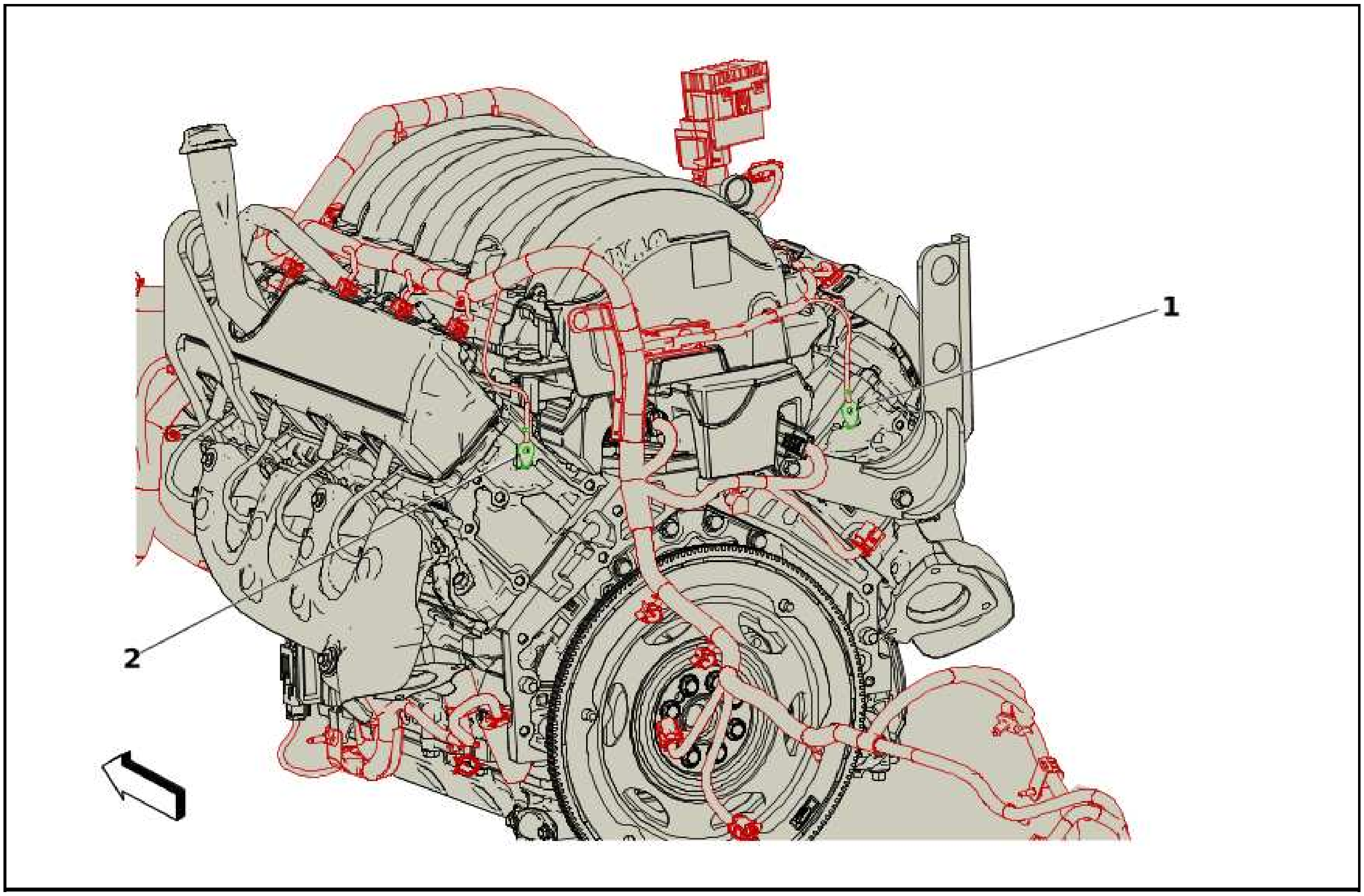


5593596

Items

(1)	G118 Engine Harness (LM2)

G121 and G122 (L82/L84/L87)

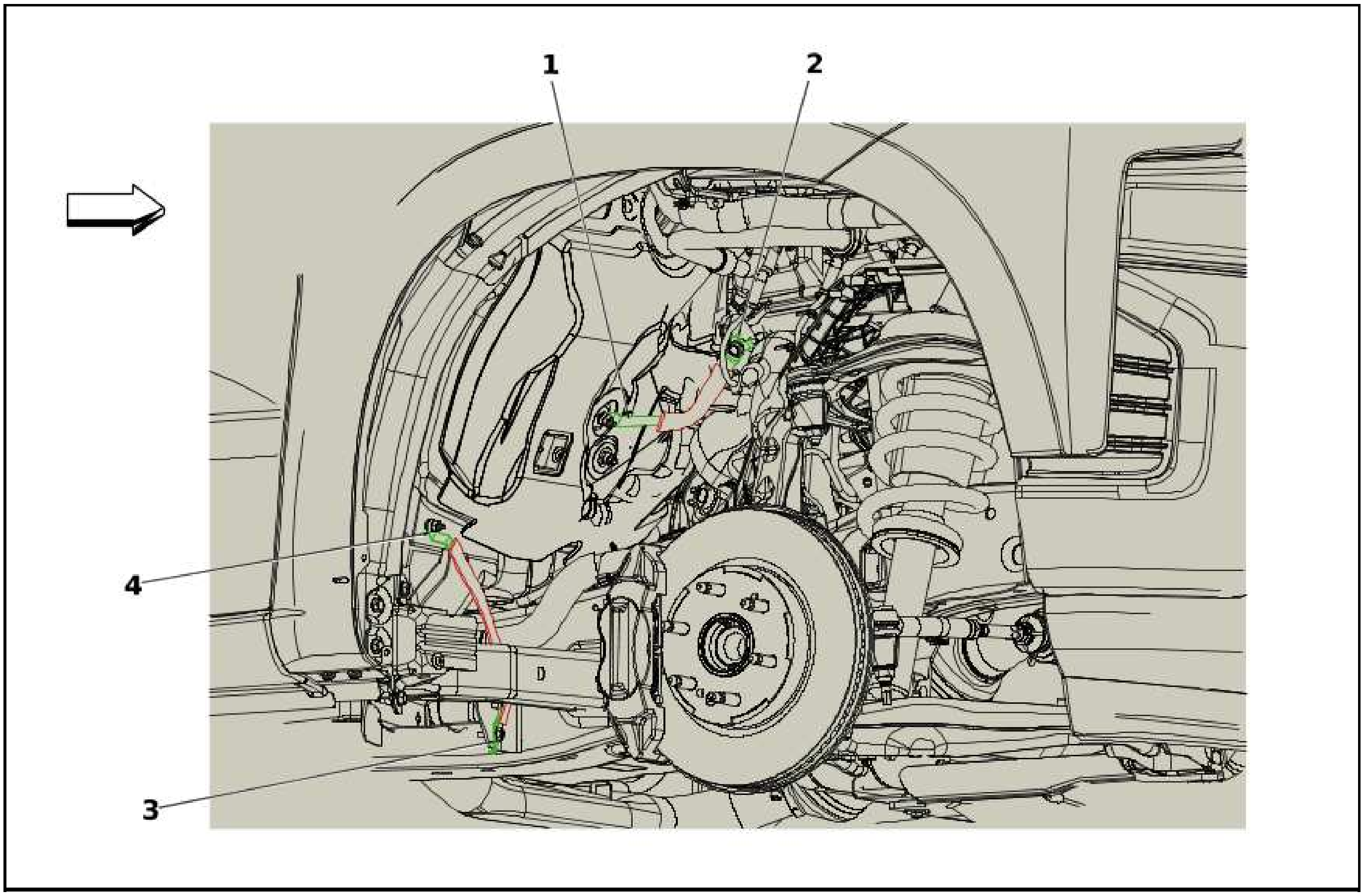


5034758

Items

(1)	G122 Engine Harness
(2)	G121 Engine Harness

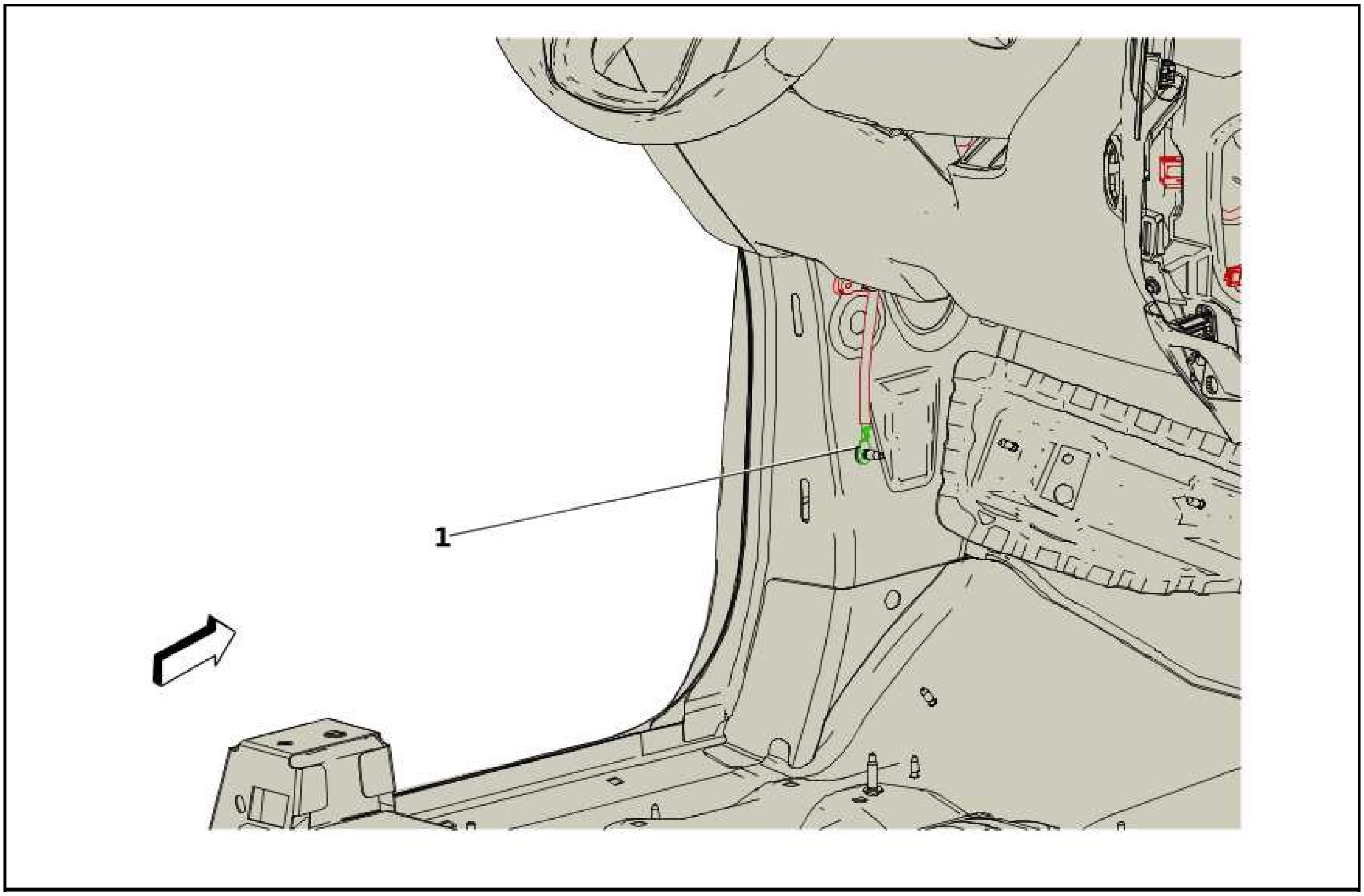
G131, G132, G133, and G134



5182364

Items	
(1)	G132 Engine Ground Strap
(2)	G134 Engine Ground Strap
(3)	G131 Frame Ground Strap
(4)	G133 Frame Ground Strap

G200

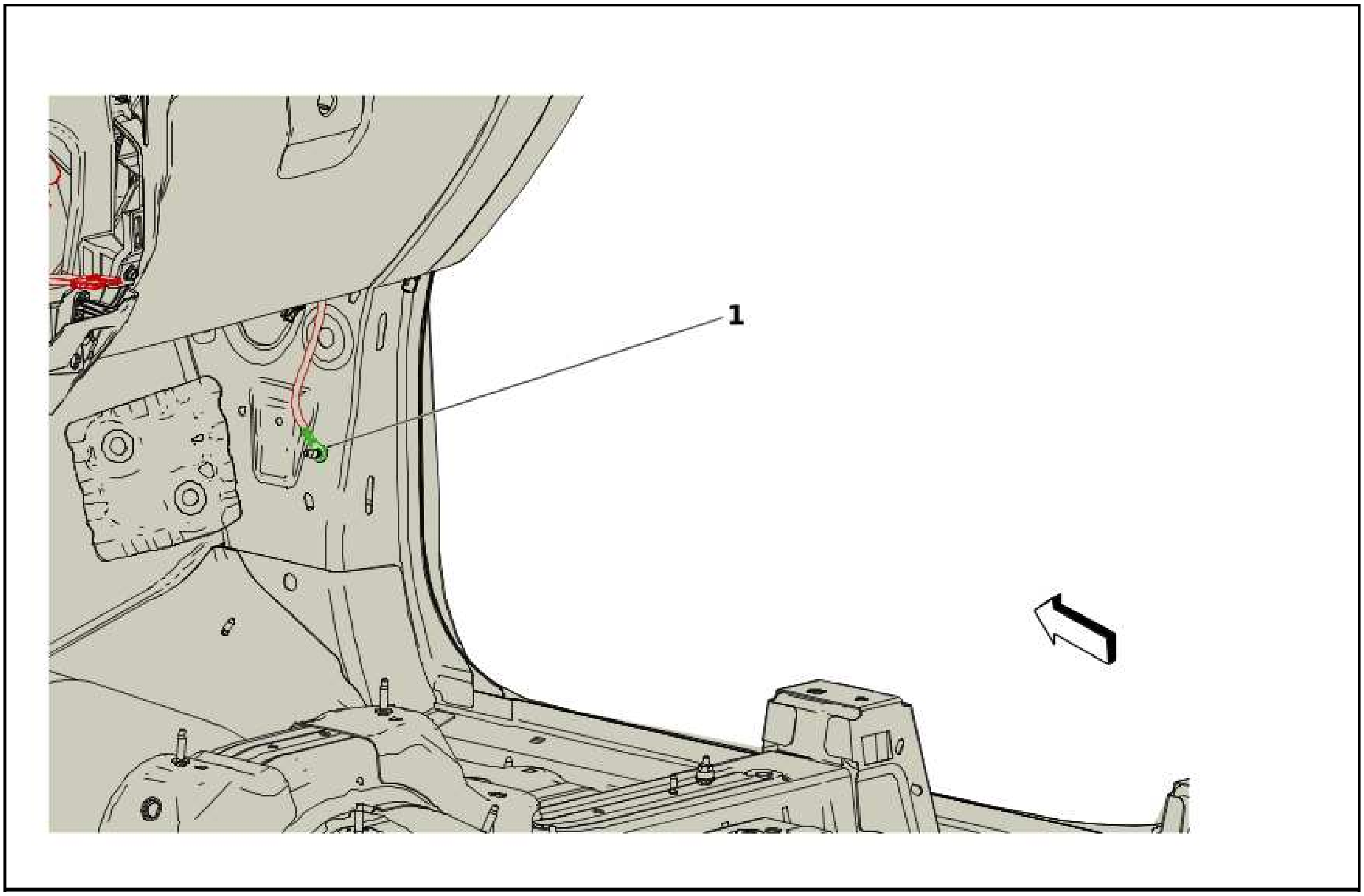


5034759

Items

(1)	G200 Instrument Panel Harness

G220

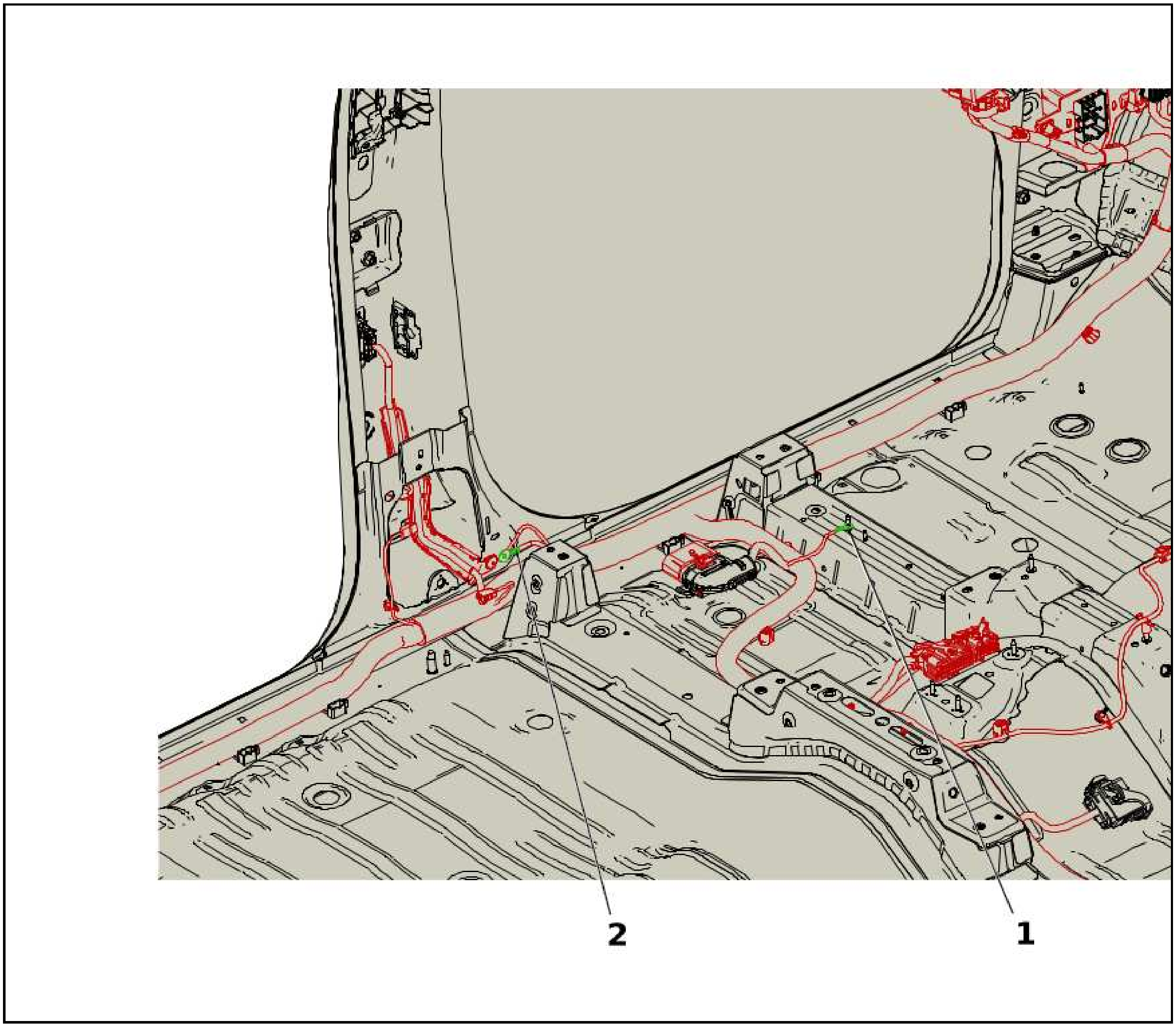


5034760

Items

(1)	G220 Instrument Panel Harness

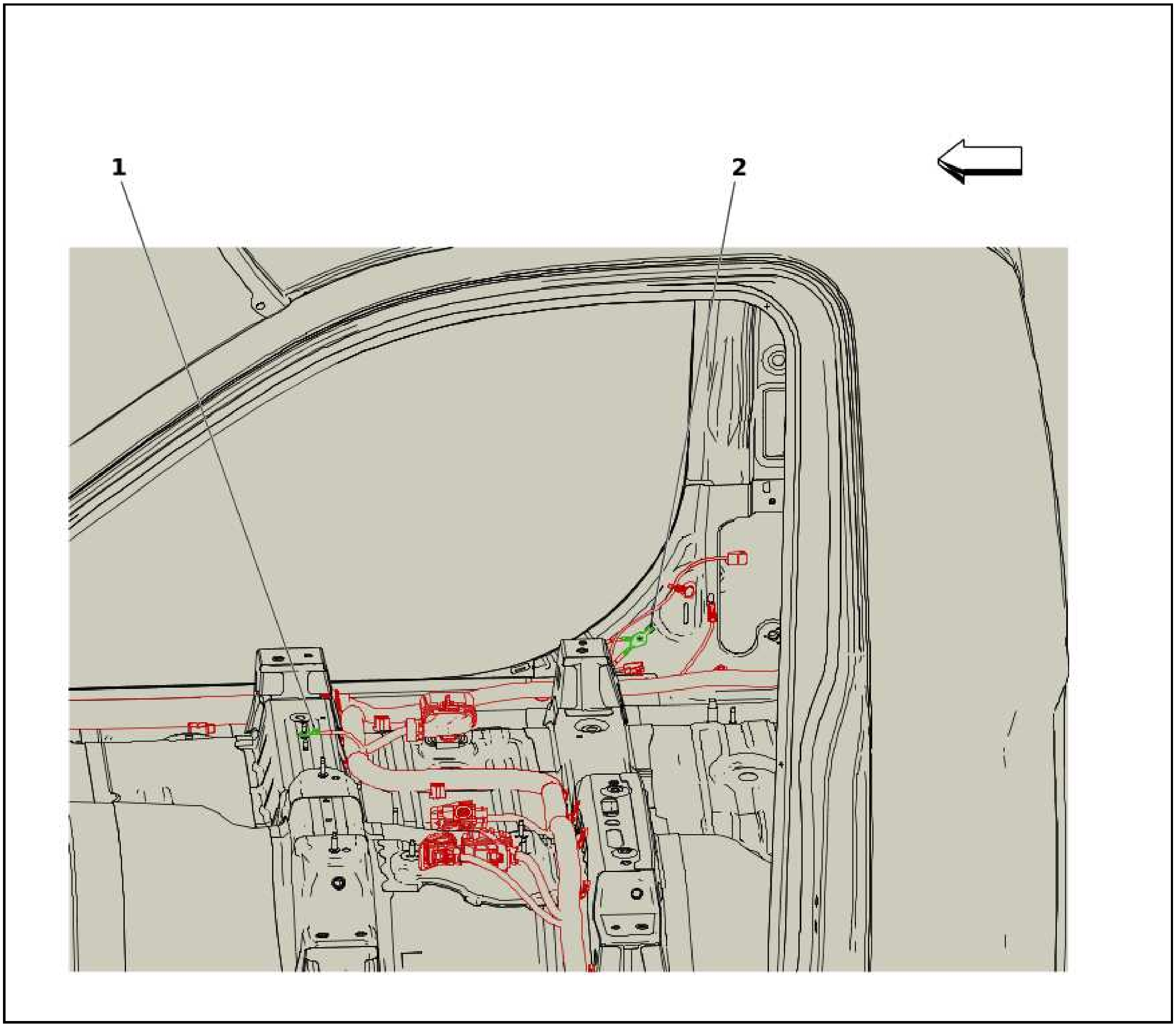
G300 and G308



5023374

Items	
(1)	G308 Body Harness
(2)	G300 Body Harness

G312 and G320

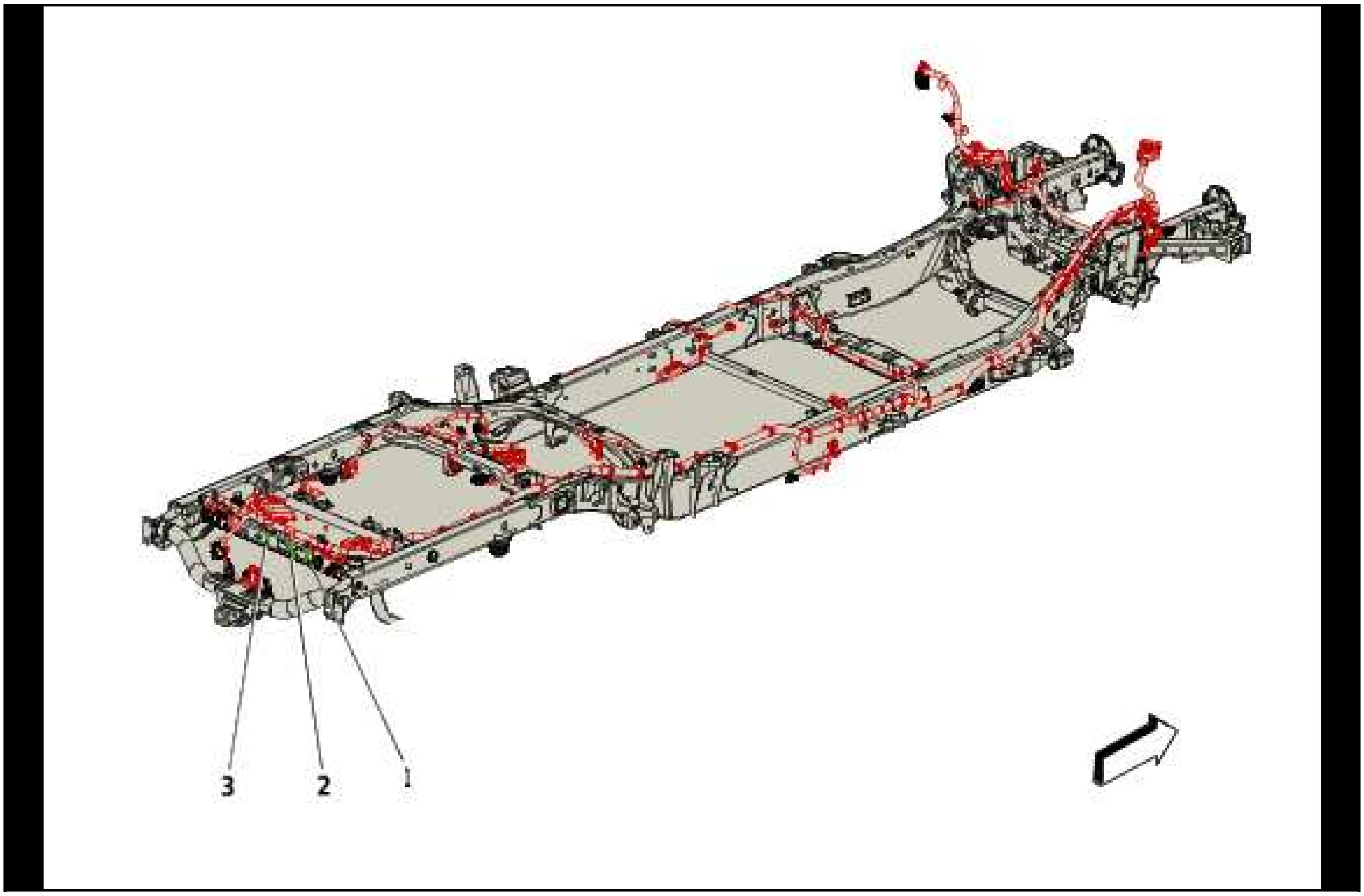


5023375

Items

(1)	G312 Body Harness
(2)	G320 Body Harness

G322, G400, G405, and G415



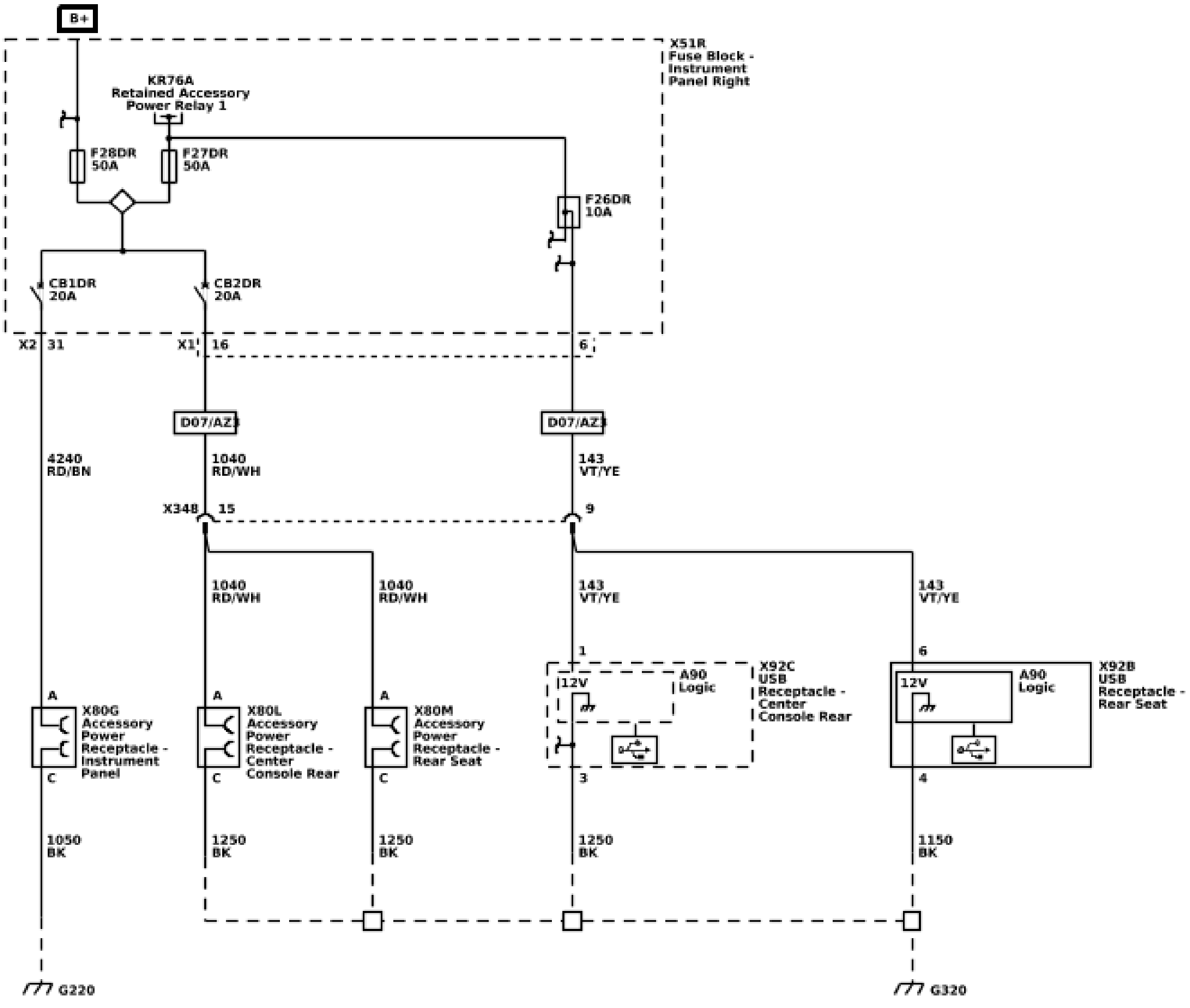
5002862

Items	
(1)	G400 Chassis Harness
(2)	G405 Chassis Harness
(3)	G415 Chassis Harness

Power Outlets

Schematic and Routing Diagrams

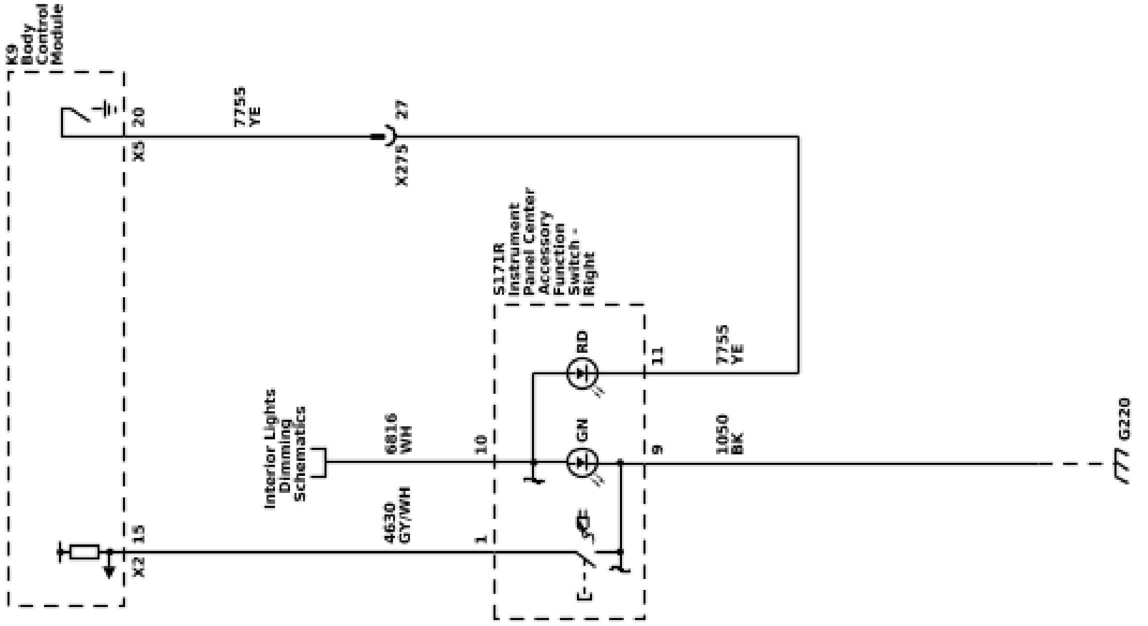
Cigar Lighter/Power Outlet Schematics (12V DC Power Outlets and USB Receptacles)


B+
X51R
Fuse Block -
Instrument
Panel Right
KR76A
Retained Accessory
Power Relay 1
F28DR
50A
F27DR
50A
F26DR
10A
CB1DR
20A
CB2DR
20A
X2 31
X1 16
6
D07/AZ1
D07/AZ1
4240
RD/BN
1040
RD/WH
143
VT/YE
X348 15
9
1040
RD/WH
1040
RD/WH
143
VT/YE
143
VT/YE
1
6
A
X80G
Accessory
Power
Receptacle -
Instrument
Panel
C
A
X80L
Accessory
Power
Receptacle -
Center
Console Rear
C
A
X80M
Accessory
Power
Receptacle -
Rear Seat
C
12V
A90
Logic
X92C
USB
Receptacle -
Center
Console Rear
3
12V
A90
Logic
X92B
USB
Receptacle -
Rear Seat
4
1050
BK
1250
BK
1250
BK
1250
BK
1150
BK
G220
G320

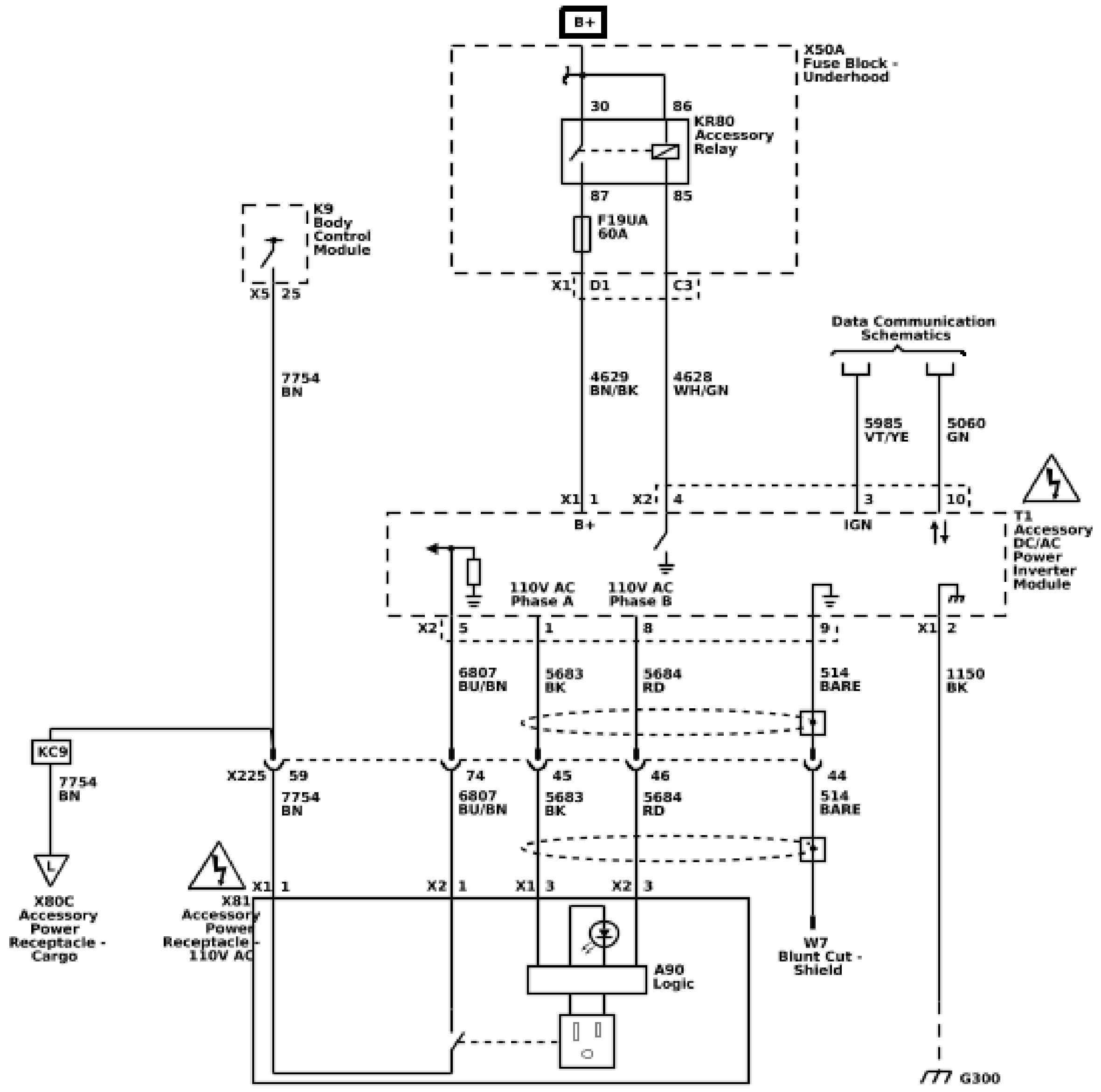
5502200

Cigar Lighter/Power Outlet Schematics (Power Receptacle Controls and Indicators (KI4/KI5/KC9/KCA))

5502201

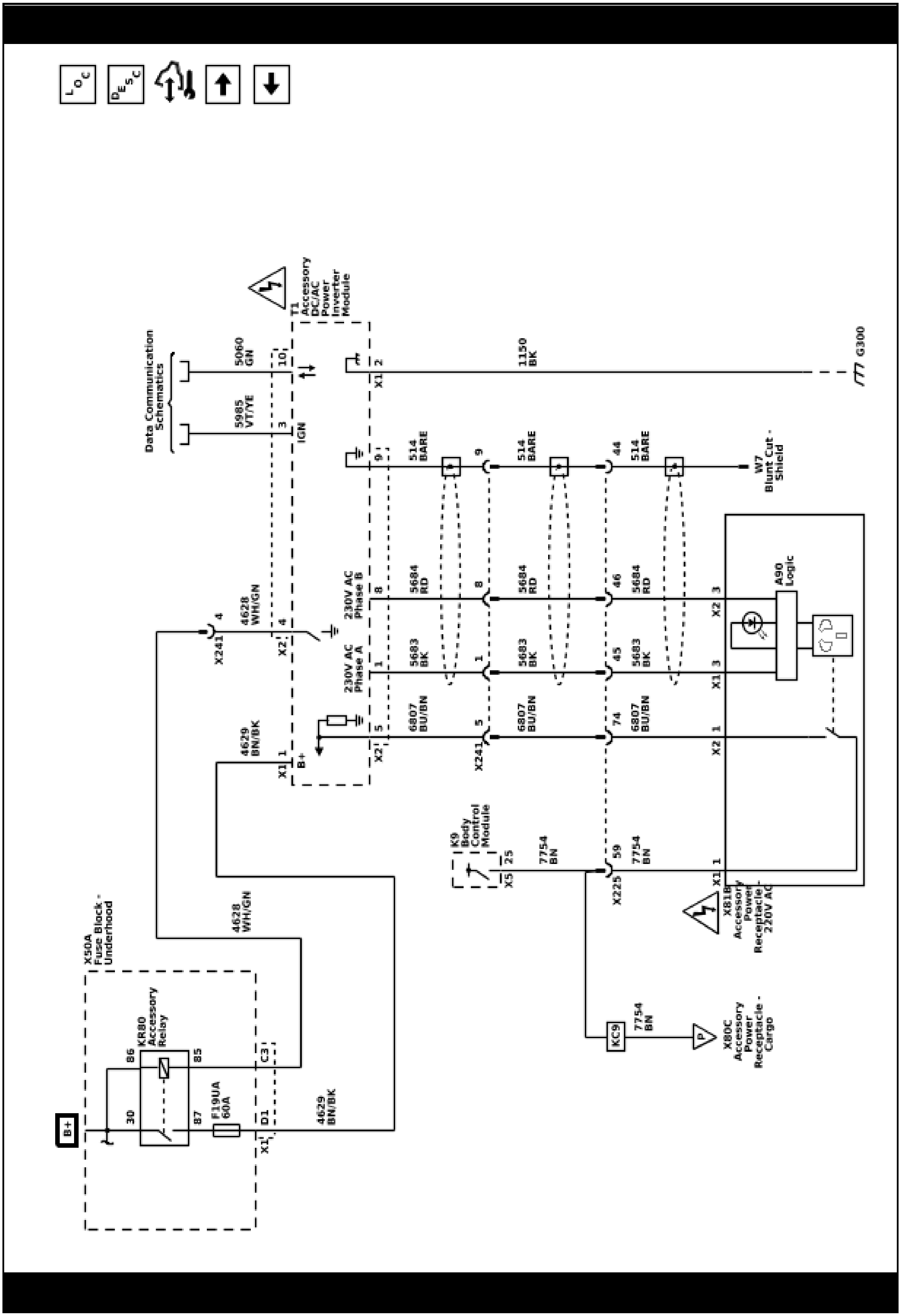

K9 Body Control Module
X5 20
7755 YE
X275 27
S171R Instrument Panel Center Accessory Function Switch - Right
RD
11
7755 YE
Interior Lights Dimming Schematics
6816 WH
10
GN
9
1050 BK
G220
X2 15
4630 GY/WH
1

Cigar Lighter/Power Outlet Schematics (Inverter Module and Instrument Panel Power Receptacle - 110V AC (KI4))

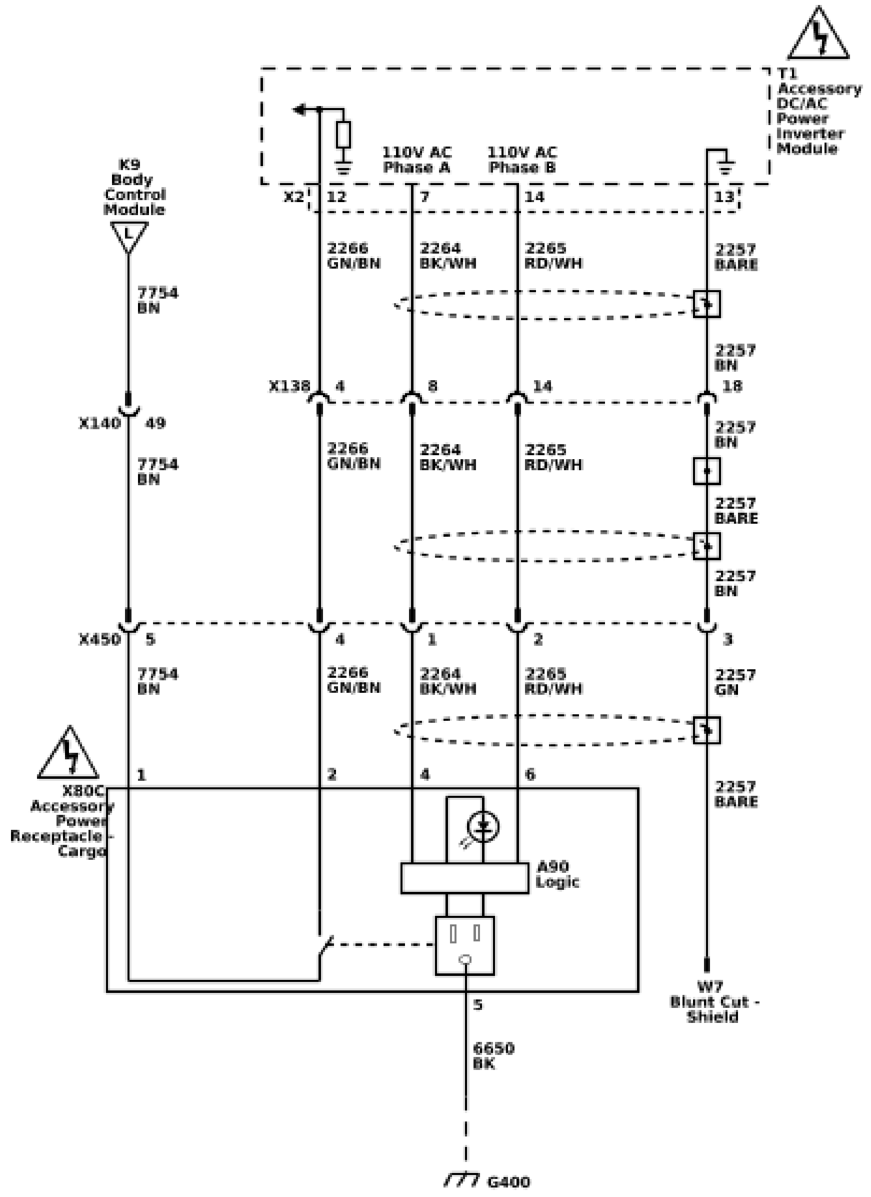

B+
X50A
Fuse Block -
Underhood
30
86
KR80
Accessory
Relay
87
85
F19UA
60A
X1
D1
C3
K9
Body
Control
Module
X5
25
7754
BN
4629
BN/BK
4628
WH/GN
Data Communication
Schematics
5985
VT/YE
5060
GN
X1
1
X2
4
3
10
B+
IGN
T1
Accessory
DC/AC
Power
Inverter
Module
110V AC
Phase A
110V AC
Phase B
X2
5
1
8
9
X1
2
6807
BU/BN
5683
BK
5684
RD
514
BARE
1150
BK
KC9
7754
BN
X225
59
7754
BN
74
6807
BU/BN
45
5683
BK
46
5684
RD
44
514
BARE
L
X80C
Accessory
Power
Receptacle -
Cargo
X81
Accessory
Power
Receptacle -
110V AC
X1
1
X2
1
X1
3
X2
3
A90
Logic
W7
Blunt Cut -
Shield
G300

5502202

Cigar Lighter/Power Outlet Schematics (Inverter Module and Instrument Panel Power Receptacle - 230V AC (KI5))

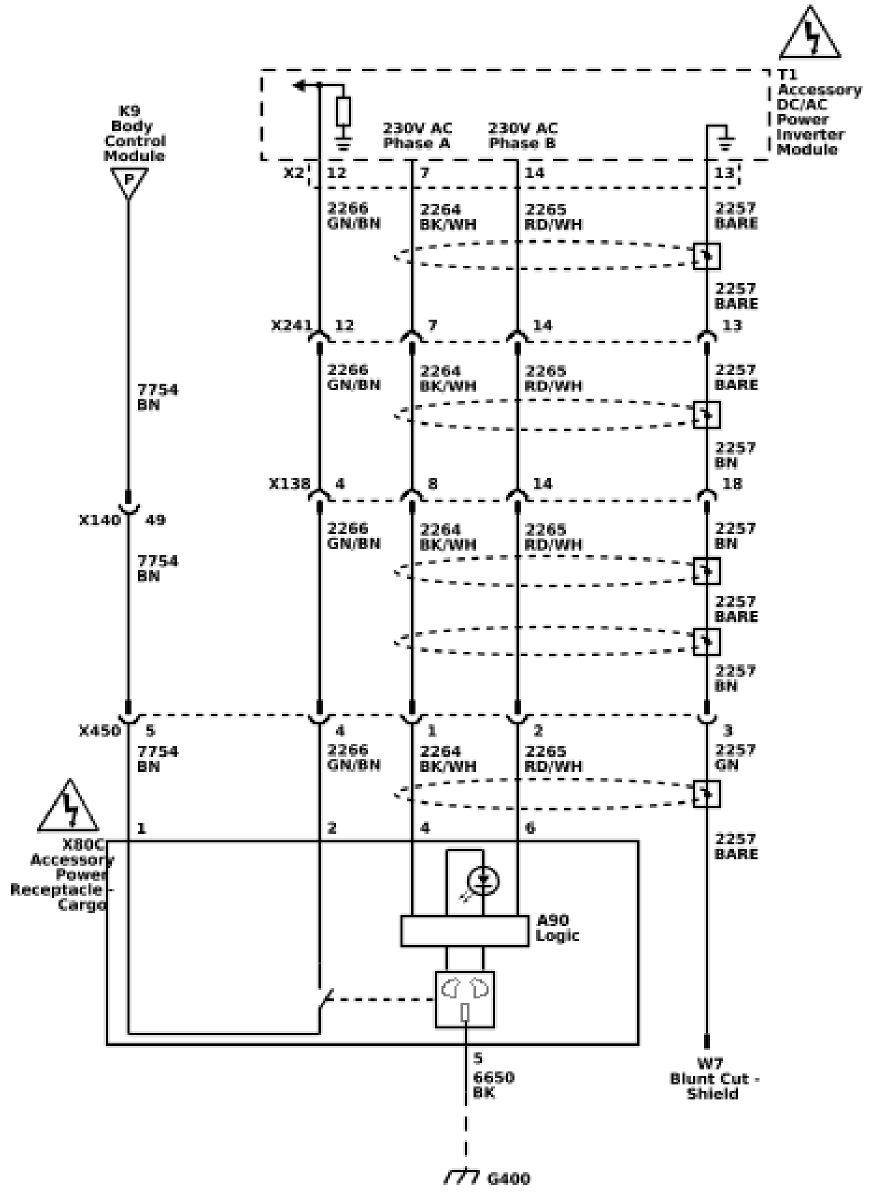

5502203
B+
X50A Fuse Block - Underhood
KR80 Accessory Relay
30
86
85
87
F19UA 60A
C3
D1
X1
4629 BN/BK
4628 WH/GN
X241
4
2
X2
T1 Accessory DC/AC Power Inverter Module
B+
1
X1
5
230V AC Phase A
230V AC Phase B
8
9
IGN
3
10
Data Communication Schematics
5985 VT/YE
5060 GN
1150 BK
G300
6807 BU/BN
5683 BK
5684 RD
514 BARE
74
45
46
44
59
X225
W7 Blunt Cut - Shield
K9 Body Control Module
25
X5
7754 BN
KC9
P
X80C Accessory Power Receptacle - Cargo
X81B Accessory Power Receptacle - 220V AC
A90 Logic
X2 3
X1 3
X2 1
X1 1

Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle - 110V AC (KC9))


T1 Accessory DC/AC Power Inverter Module
110V AC Phase A
110V AC Phase B
X2 12
7
14
13
K9 Body Control Module
7754 BN
2266 GN/BN
2264 BK/WH
2265 RD/WH
2257 BARE
2257 BN
X138 4
8
14
18
X140 49
7754 BN
2266 GN/BN
2264 BK/WH
2265 RD/WH
2257 BN
2257 BARE
2257 BN
X450 5
4
1
2
3
7754 BN
2266 GN/BN
2264 BK/WH
2265 RD/WH
2257 GN
X80C Accessory Power Receptacle - Cargo
1
2
4
6
2257 BARE
A90 Logic
5
6650 BK
W7 Blunt Cut - Shield
G400

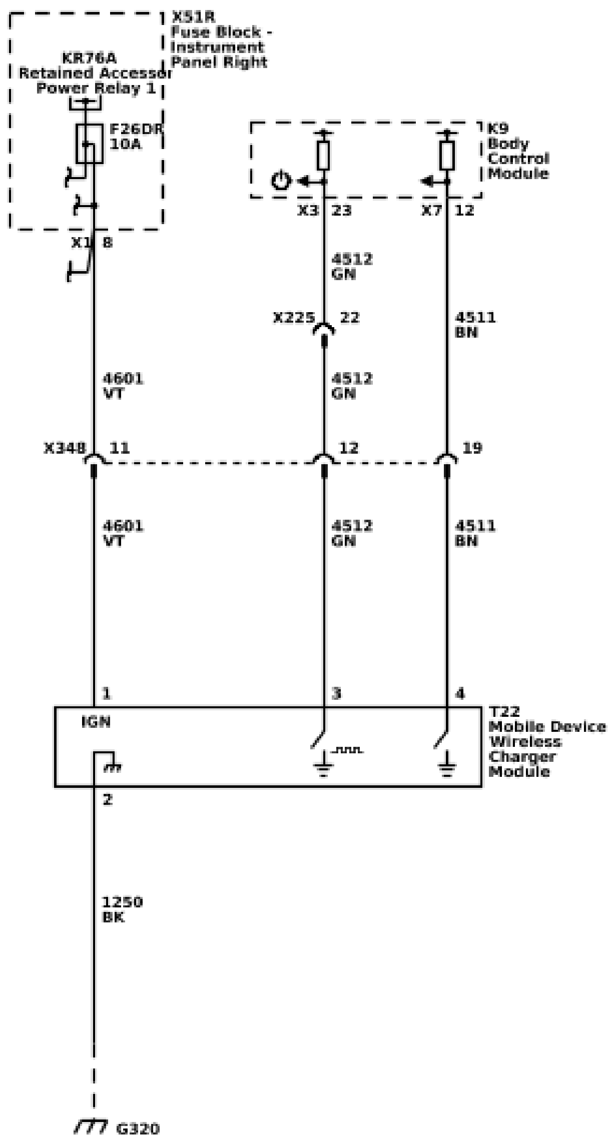
5502204

Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle - 230V AC (KCA))


T1
Accessory
DC/AC
Power
Inverter
Module
K9
Body
Control
Module
P
230V AC
Phase A
230V AC
Phase B
X2
12
7
14
13
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BARE
2257
BARE
X241
12
7
14
13
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BARE
7754
BN
2257
BN
X138
4
8
14
18
X140
49
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BN
7754
BN
2257
BARE
2257
BN
X450
5
4
1
2
3
7754
BN
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
GN
1
2
4
6
2257
BARE
X80C
Accessory
Power
Receptacle -
Cargo
A90
Logic
5
6650
BK
W7
Blunt Cut -
Shield
G400

5502205

Cigar Lighter/Power Outlet Schematics (Wireless Charging (K4C))


X51R
Fuse Block -
Instrument
Panel Right
KR76A
Retained Accessor
Power Relay 1
F26DR
10A
X1 8
K9
Body
Control
Module
X3 23
X7 12
4512
GN
X225 22
4511
BN
4601
VT
4512
GN
X348 11
12
19
4601
VT
4512
GN
4511
BN
1
3
4
IGN
T22
Mobile Device
Wireless
Charger
Module
2
1250
BK
G320

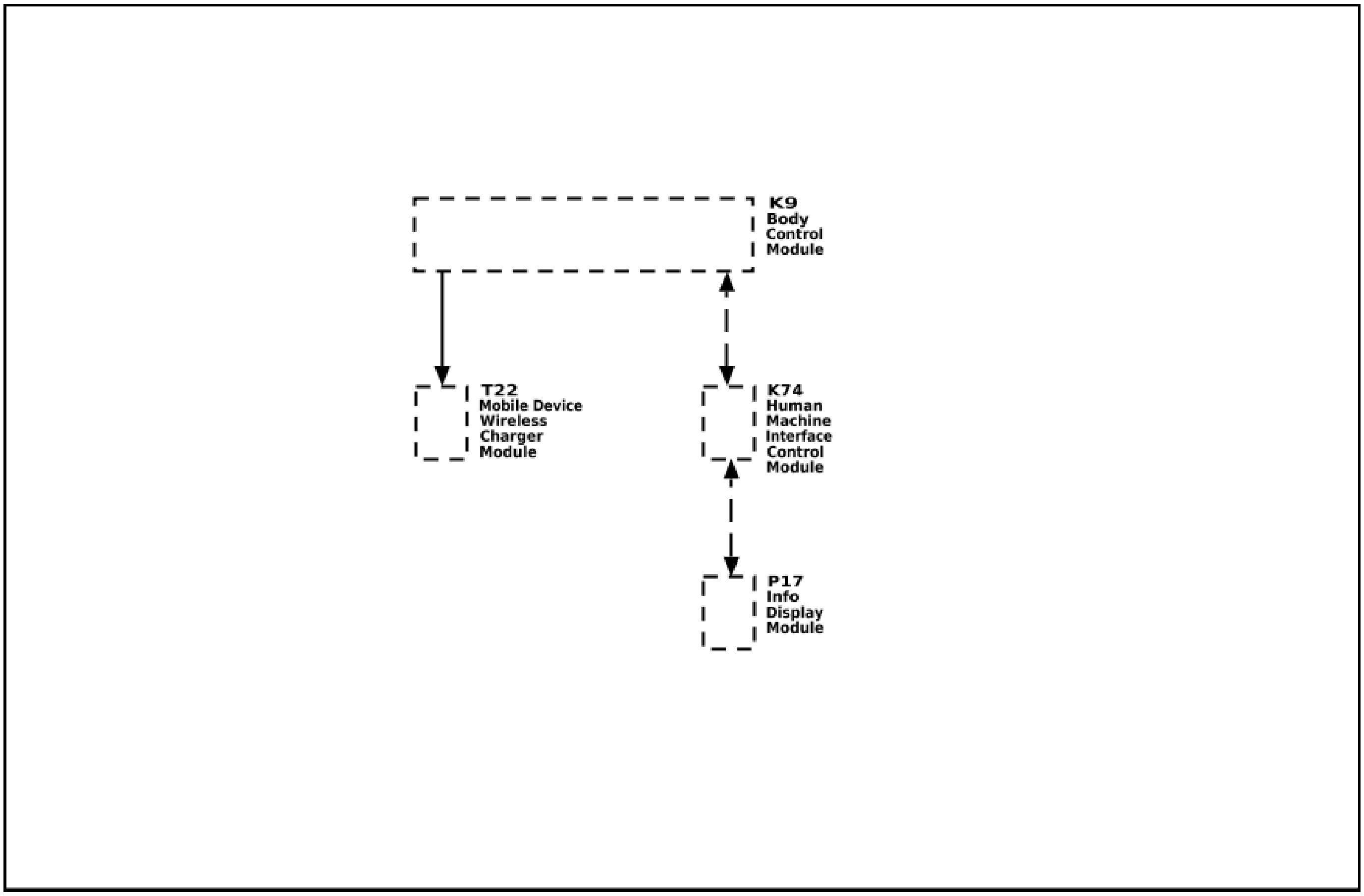
5502206

Description and Operation

Mobile Device Wireless Charger Description and Operation

Mobile Device Wireless Charging System

Mobile Device Wireless Charging System Block Diagram


K9
Body Control Module
T22
Mobile Device Wireless Charger Module
K74
Human Machine Interface Control Module
P17
Info Display Module

3607745

The Mobile Device Wireless Charging System (WCS) is an system for wirelessly charging mobile devices. It is capable of charging the batteries of compatible mobile devices. A compatible device is one that is compliant with Power Matters Alliance (PMA) or Wireless Power Consortium (WPC) Standard, meaning that it is equipped with a PMA or WPC wireless charge “receiver” that will work with the charge “transmitter” installed in the vehicle. The devices may utilize built-in charging circuitry or an adapter (external plug-in device which contains the charging circuitry). To check for phone or other device compatibility, refer to GM Total Connect.

Warning: Remove all objects from the charging pad before charging your mobile device. Objects, such as coins, keys, rings, paper clips, or cards, between the phone and charging pad will become very hot. On the rare occasion that the charging system does not detect an object, and the object gets wedged between the phone and charger, remove the phone and allow the object to cool before removing it from the charging pad, to prevent burns.

Charging

To charge a device, place it on the charging surface in the vehicle. There is a charging coil located in the center of the charging surface. The device has a charging coil typically near the center of the device. These coils must be lined up in order for charging to proceed. When the interruptible retained accessory power (IRAP) relay is closed (this is true typically when vehicle ignition is in Run or Accessory position), the WCS will detect the device, establish communications with the device to confirm it is a compatible device, and then deliver charging power to the device via wireless interface. The WCS will be able to deliver up to 5W of power to compatible devices. It shall only enter a charging state if communication is established and a compatible device is identified.

The WCS shall not enter a charging state if there is no communication established with a compatible device. If a non-compatible device or metallic foreign object is detected, the WCS will not transfer power. The charger monitors its internal temperature and will shut down if the charger temperature exceeds 185F (85C).

Indicator

The body control module will detect the device battery is charging and send a serial data message on the GMLAN bus to the radio display. The radio display will indicate a device is currently charging. When the indicator is toggling on and off this indicates a thermal limit has been reached and the device will not charge. For more information refer to the owners manual.

Cooling

The wireless charger is kept cool using the HVAC system. There is a dedicated HVAC duct that connects to the Wireless Charging Module bracket (which holds the module and the mat).

Power Outlets Description and Operation

12 Volt Power Outlet Receptacle Description and Operation

The vehicle is fitted with a 12 V accessory power receptacle. The accessory power receptacles are controlled by an ignition operated relay. The accessory power receptacles are operational when the ignition is turned to either the On or the Accessories positions. The X80 accessory power receptacles may be configured to be operational when the ignition is Off by changing the position of the 50A fuse from the F28DR position to the F27DR position in the instrument panel fuse block.

110 Volt Power Outlet Receptacle System Description

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 110 V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 110 V at 60 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 400 watts of power. The accessory power receptacle – 110 V AC provides the usual connection for AC powered devices.

110 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 110 V AC has an internal switch, that detects when an AC powered device is plugged into the outlet, and an Accessory Power Switch located on the S171R Instrument Panel Center Accessory Function Switch — Right. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 110 V AC, the normally open switch in the accessory power receptacle – 110 V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 110 V AC switch, the inverter module begins to supply 110 V AC to the accessory power receptacle – 110 V AC after a 1.5 s delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

110 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 110 V circuit for a short to vehicle chassis ground. If a 110 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

110 Volt Power Outlet Receptacle Overload Shutdown

The accessory DC/AC power inverter module will turn OFF if the current in the 110 V circuit is greater than 3.8 A for 1 s , or 2.5 A for 10 s . The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

110 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the outlet, and then plugged into the outlet.

220 Volt Power Outlet Receptacle System Description

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 220V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 220–230 V at 50 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 400 watts of power. The accessory power receptacle – 220V AC provides the usual connection for AC powered devices.

220 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 220 V AC has an internal switch, that detects when an AC powered device is plugged into the outlet, and an Accessory Power Switch located on the S171R Instrument Panel Center Accessory Function Switch — Right. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 220 V AC, the normally open switch in the accessory power receptacle – 220 V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 220 V AC switch, the inverter module begins to supply 220 V AC to the accessory power receptacle – 220 V AC after a 1.5 s delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

220 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 220 V circuit for a short to vehicle chassis ground. If a 220 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

220 Volt Power Outlet Receptacle Overload Shutdown

The accessory AC/DC power control module will turn OFF if the current in the 220 V circuit is greater than 3.8 A for 1 second, or 2.5 A for 10 seconds. The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 second delay.

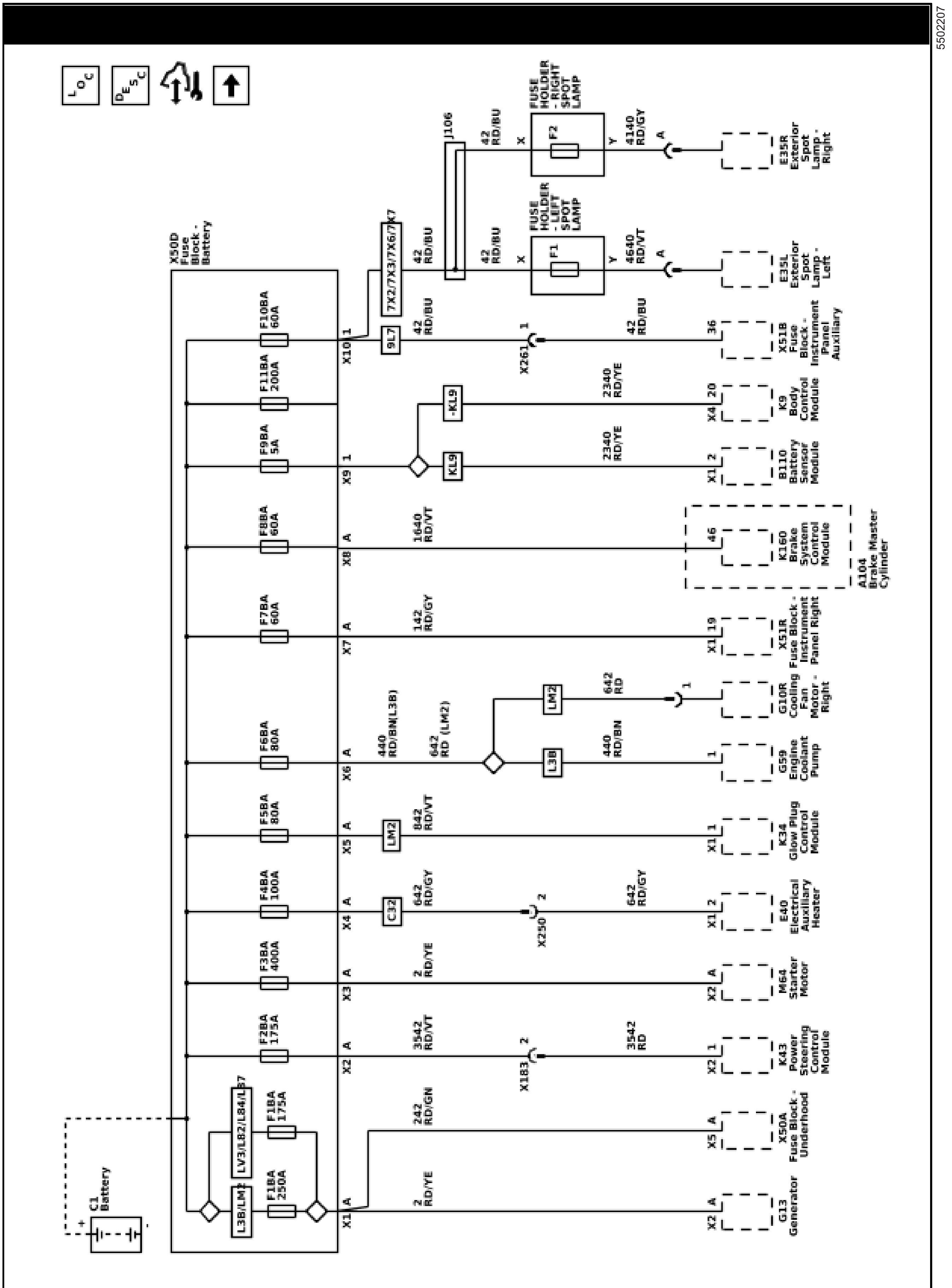
220 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the accessory power receptacle – 220V AC, and then plugged into the accessory power receptacle – 220V AC.

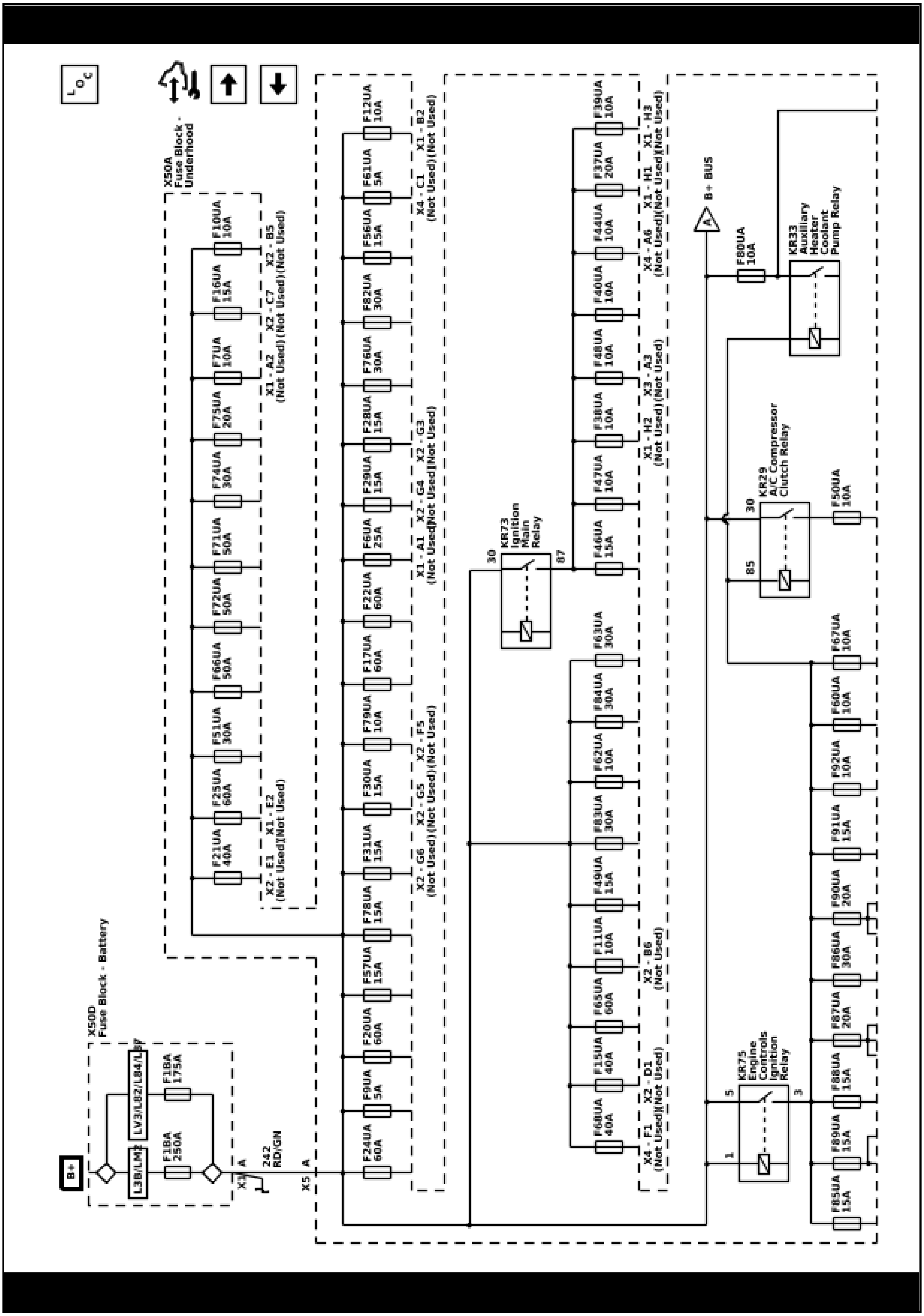
Wiring Systems and Power Management

Schematic and Routing Diagrams

Power Distribution Schematics (X50D Battery Fuse Block and Spot Lamp Fuse Holders (7X2/7X3/7X6/7X7))

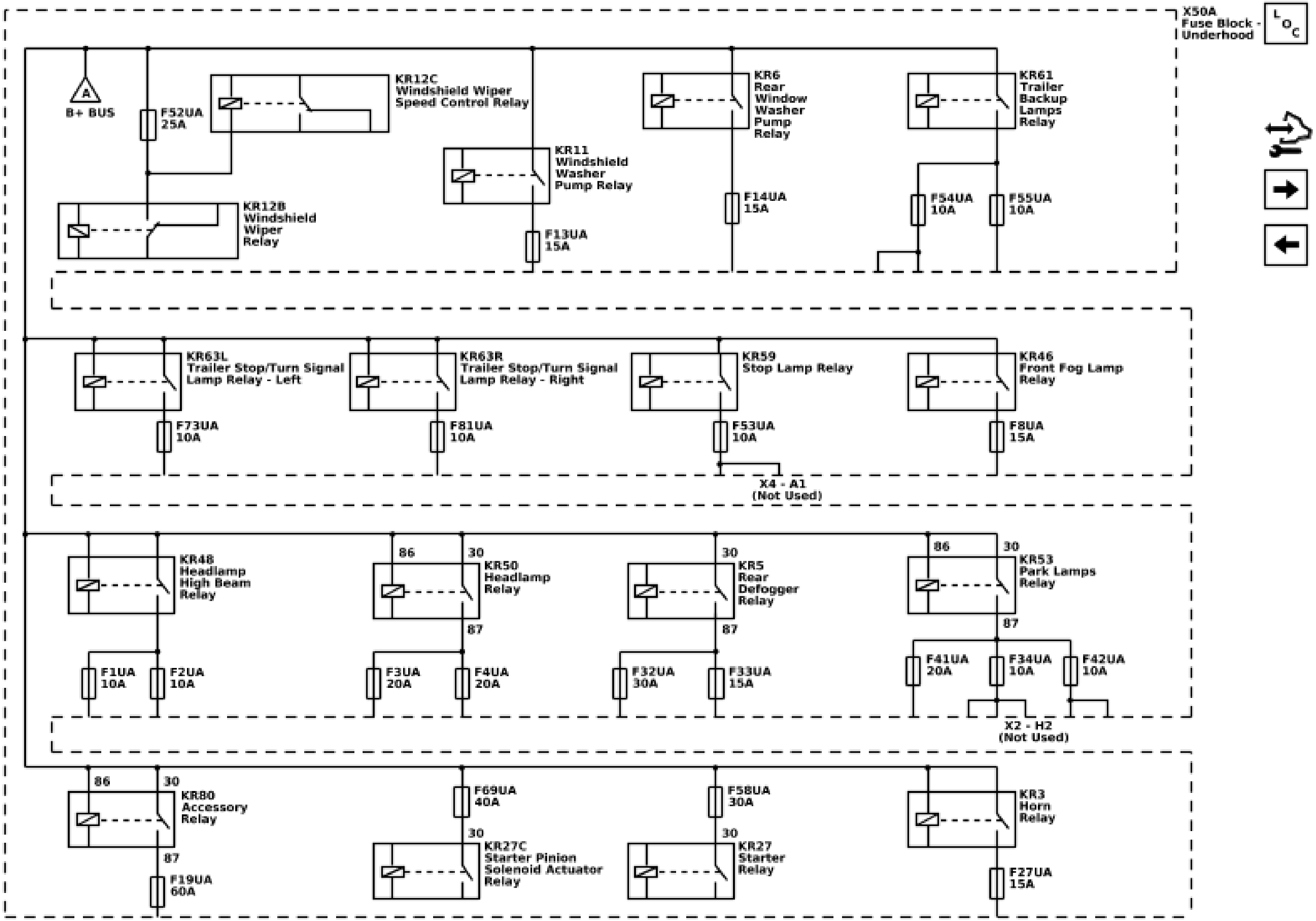

5502207
LOC
DESC
C1 Battery
+
-
X50D Fuse Block - Battery
L3B/LM2
LV3/L82/L84/L87
F1BA 250A
F1BA 175A
F2BA 175A
F3BA 400A
F4BA 100A
F5BA 80A
F6BA 80A
F7BA 60A
F8BA 60A
F9BA 5A
F11BA 200A
F10BA 60A
X1 A
X2 A
X3 A
X4 A
X5 A
X6 A
X7 A
X8 A
X9 1
X10 1
2 RD/YE
242 RD/GN
3542 RD/VT
X183 2
3542 RD
2 RD/YE
C32
642 RD/GY
X250 2
642 RD/GY
LM2
842 RD/VT
440 RD/BN(L3B)
642 RD (LM2)
L3B
440 RD/BN
LM2
642 RD
1
142 RD/GY
1640 RD/VT
KL9
-KL9
2340 RD/YE
2340 RD/YE
9L7
42 RD/BU
X261 1
42 RD/BU
7X2/7X3/7X6/7X7
42 RD/BU
J106
42 RD/BU
42 RD/BU
X
F1
Y
4640 RD/VT
A
X
F2
Y
4140 RD/GY
A
FUSE HOLDER - LEFT SPOT LAMP
FUSE HOLDER - RIGHT SPOT LAMP
X2 A
G13 Generator
X5 A
X50A Fuse Block - Underhood
X2 1
K43 Power Steering Control Module
X2 A
M64 Starter Motor
X1 2
E40 Electrical Auxiliary Heater
X1 1
K34 Glow Plug Control Module
1
G59 Engine Coolant Pump
G10R Cooling Fan Motor - Right
X1 19
X51R Fuse Block - Instrument Panel Right
46
K160 Brake System Control Module
A104 Brake Master Cylinder
X1 2
B110 Battery Sensor Module
X4 20
K9 Body Control Module
36
X51B Fuse Block - Instrument Panel Auxiliary
E35L Exterior Spot Lamp - Left
E35R Exterior Spot Lamp - Right

Power Distribution Schematics (X50A Underhood Fuse Block Bussing (1 of 2))


B+
X50D
Fuse Block - Battery
L3B/LM2
LV3/L82/L84/L87
F1BA
250A
F1BA
175A
X1 A
242
RD/GN
X5 A
X50A
Fuse Block - Underhood
F21UA 40A
F25UA 60A
F51UA 30A
F66UA 50A
F72UA 50A
F71UA 50A
F74UA 30A
F75UA 20A
F7UA 10A
F16UA 15A
F10UA 10A
X2 - E1 (Not Used)
X1 - E2 (Not Used)
X1 - A2 (Not Used)
X2 - C7 (Not Used)
X2 - B5 (Not Used)
F24UA 60A
F9UA 5A
F20UA 60A
F57UA 15A
F78UA 15A
F31UA 15A
F30UA 15A
F79UA 10A
F17UA 60A
F22UA 60A
F6UA 25A
F29UA 15A
F28UA 15A
F76UA 30A
F82UA 30A
F56UA 15A
F61UA 5A
F12UA 10A
X2 - G6 (Not Used)
X2 - G5 (Not Used)
X2 - F5 (Not Used)
X1 - A1 (Not Used)
X2 - G4 (Not Used)
X2 - G3 (Not Used)
X4 - C1 (Not Used)
X1 - B2 (Not Used)
KR73
Ignition
Main
Relay
30
87
F68UA 40A
F15UA 40A
F65UA 60A
F11UA 10A
F49UA 15A
F83UA 30A
F62UA 10A
F84UA 30A
F63UA 30A
F46UA 15A
F47UA 10A
F38UA 10A
F48UA 10A
F40UA 10A
F44UA 10A
F37UA 20A
F39UA 10A
X4 - F1 (Not Used)
X2 - D1 (Not Used)
X2 - B6 (Not Used)
X1 - H2 (Not Used)
X3 - A3 (Not Used)
X4 - A6 (Not Used)
X1 - H1 (Not Used)
X1 - H3 (Not Used)
A
B+ BUS
F80UA 10A
KR33
Auxiliary
Heater
Coolant
Pump Relay
KR29
A/C Compressor
Clutch Relay
30
85
F50UA 10A
KR75
Engine
Controls
Ignition
Relay
5
1
3
F85UA 15A
F89UA 15A
F88UA 15A
F87UA 20A
F86UA 30A
F90UA 20A
F91UA 15A
F92UA 10A
F60UA 10A
F67UA 10A

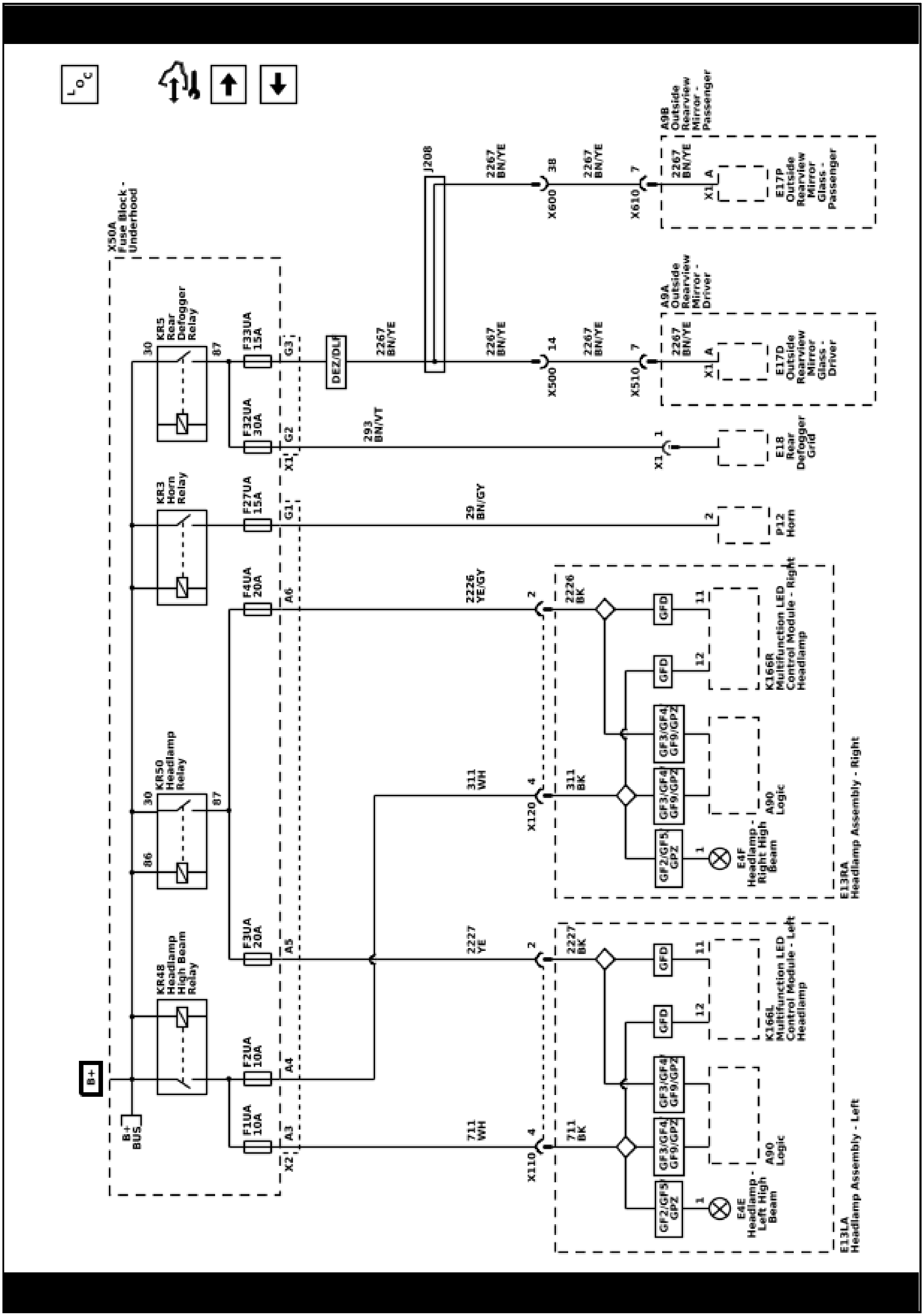
5502208

Power Distribution Schematics (X50A Underhood Fuse Block Bussing (2 of 2))


X50A
Fuse Block - Underhood
L O C
B+ BUS
A
F52UA 25A
KR12C Windshield Wiper Speed Control Relay
KR12B Windshield Wiper Relay
KR11 Windshield Washer Pump Relay
F13UA 15A
KR6 Rear Window Washer Pump Relay
F14UA 15A
KR61 Trailer Backup Lamps Relay
F54UA 10A
F55UA 10A
KR63L Trailer Stop/Turn Signal Lamp Relay - Left
F73UA 10A
KR63R Trailer Stop/Turn Signal Lamp Relay - Right
F81UA 10A
KR59 Stop Lamp Relay
F53UA 10A
X4 - A1 (Not Used)
KR46 Front Fog Lamp Relay
F8UA 15A
KR48 Headlamp High Beam Relay
F1UA 10A
F2UA 10A
86
30
KR50 Headlamp Relay
87
F3UA 20A
F4UA 20A
30
KR5 Rear Defogger Relay
87
F32UA 30A
F33UA 15A
86
30
KR53 Park Lamps Relay
87
F41UA 20A
F34UA 10A
F42UA 10A
X2 - H2 (Not Used)
86
30
KR80 Accessory Relay
87
F19UA 60A
F69UA 40A
30
KR27C Starter Pinion Solenoid Actuator Relay
F58UA 30A
30
KR27 Starter Relay
KR3 Horn Relay
F27UA 15A

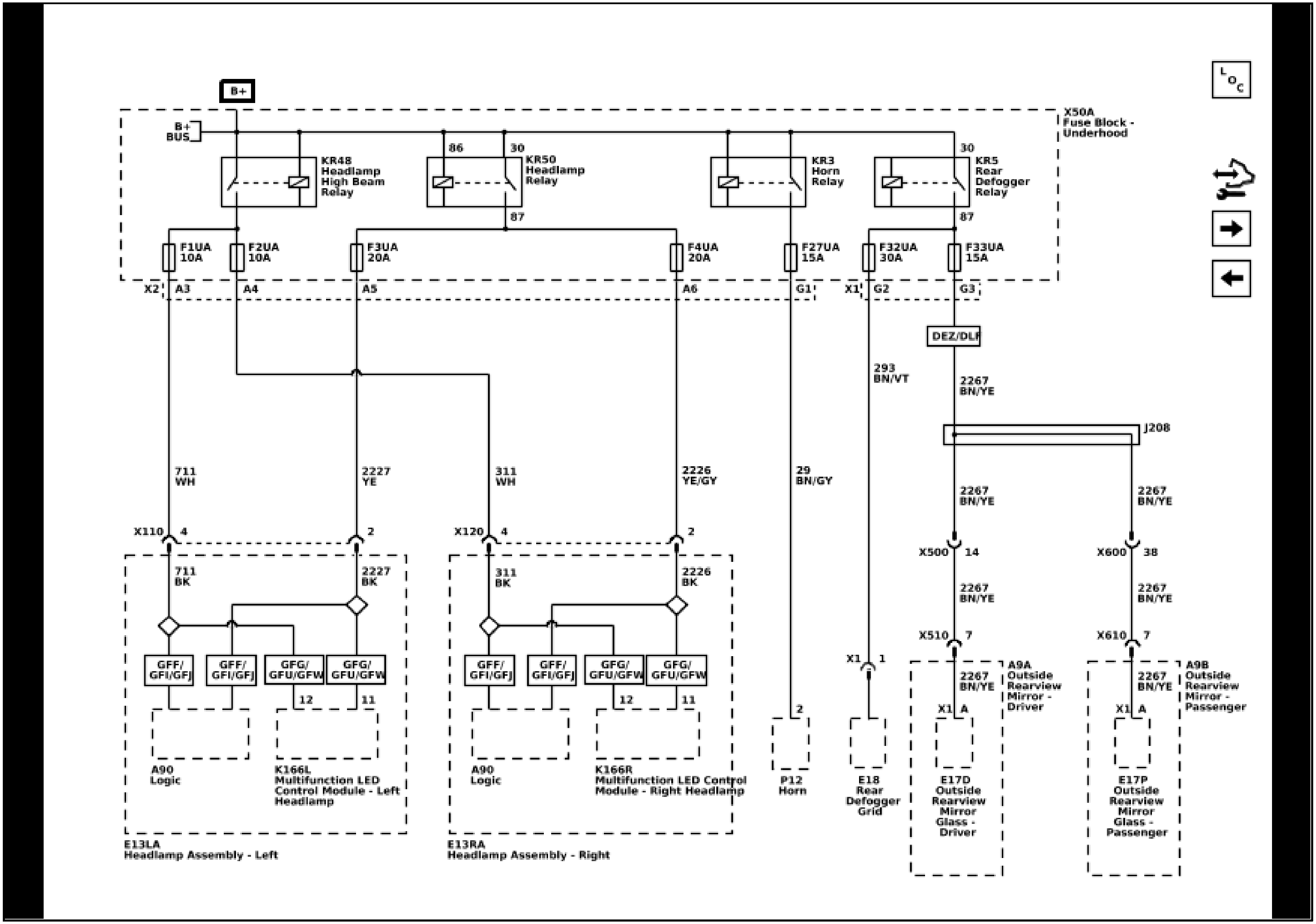
5502209

Power Distribution Schematics (F1UA, F2UA, F3UA, F4UA, F27UA, F32UA, and F33UA Fuses (X88))

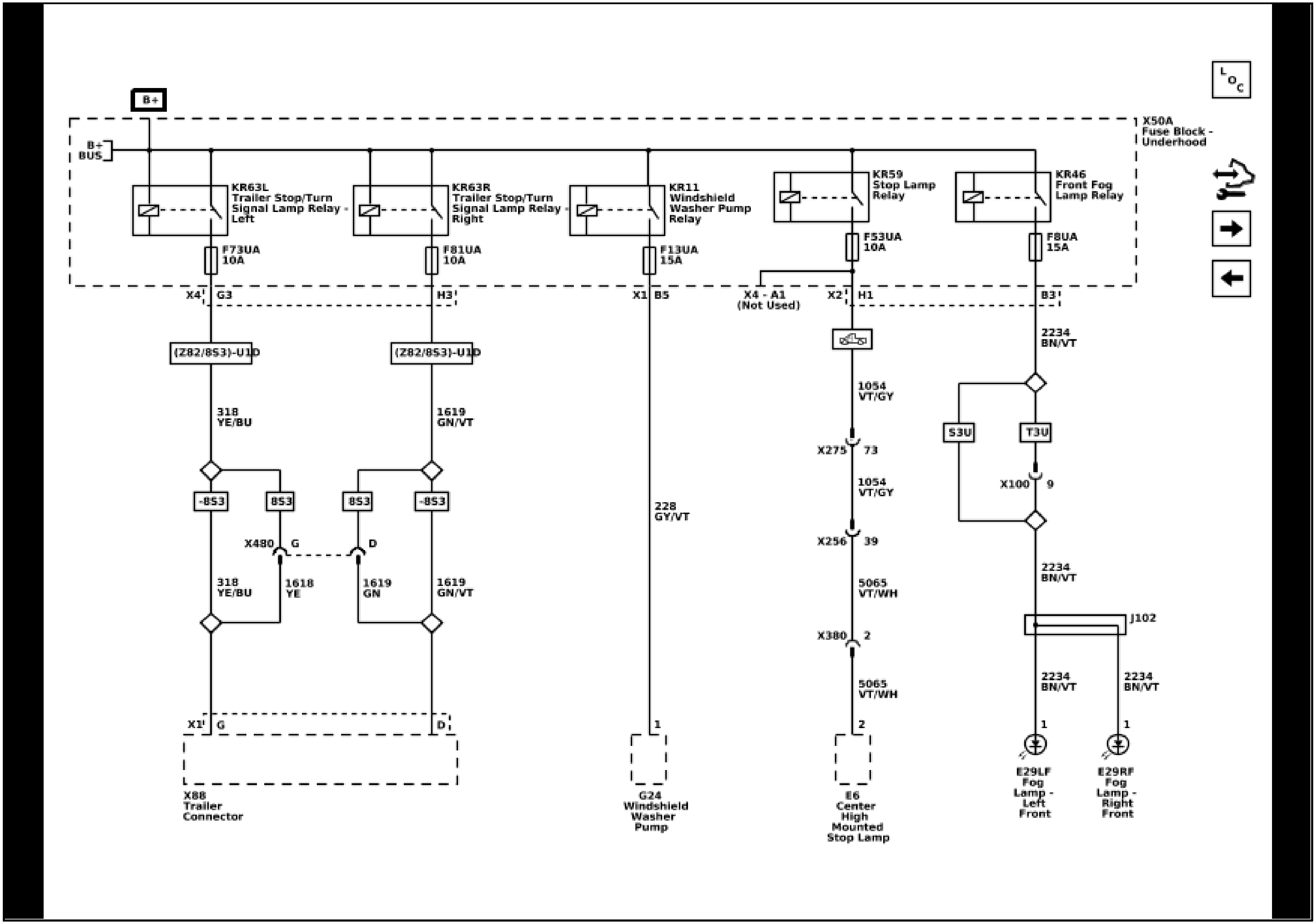

B+
B+ BUS
X50A Fuse Block - Underhood
KR48 Headlamp High Beam Relay
KR50 Headlamp Relay
KR3 Horn Relay
KR5 Rear Defogger Relay
30
86
87
F1UA 10A
F2UA 10A
F3UA 20A
F4UA 20A
F27UA 15A
F32UA 30A
F33UA 15A
X2
A3
A4
A5
A6
X1
G1
G2
G3
DEZ/DLF
J208
711 WH
311 WH
2227 YE
2226 YE/GY
29 BN/GY
293 BN/VT
2267 BN/YE
X110
X120
X500
X600
X510
X610
4
2
14
38
7
1
711 BK
311 BK
2227 BK
2226 BK
GF2/GF5 GPZ
GF3/GF4 GF9/GPZ
GFD
11
12
E4E Headlamp - Left High Beam
E4F Headlamp - Right High Beam
A90 Logic
K166L Multifunction LED Control Module - Left Headlamp
K166R Multifunction LED Control Module - Right Headlamp
E13LA Headlamp Assembly - Left
E13RA Headlamp Assembly - Right
P12 Horn
E18 Rear Defogger Grid
X1 A
A9A Outside Rearview Mirror - Driver
E17D Outside Rearview Mirror Glass - Driver
A9B Outside Rearview Mirror - Passenger
E17P Outside Rearview Mirror Glass - Passenger

5502210

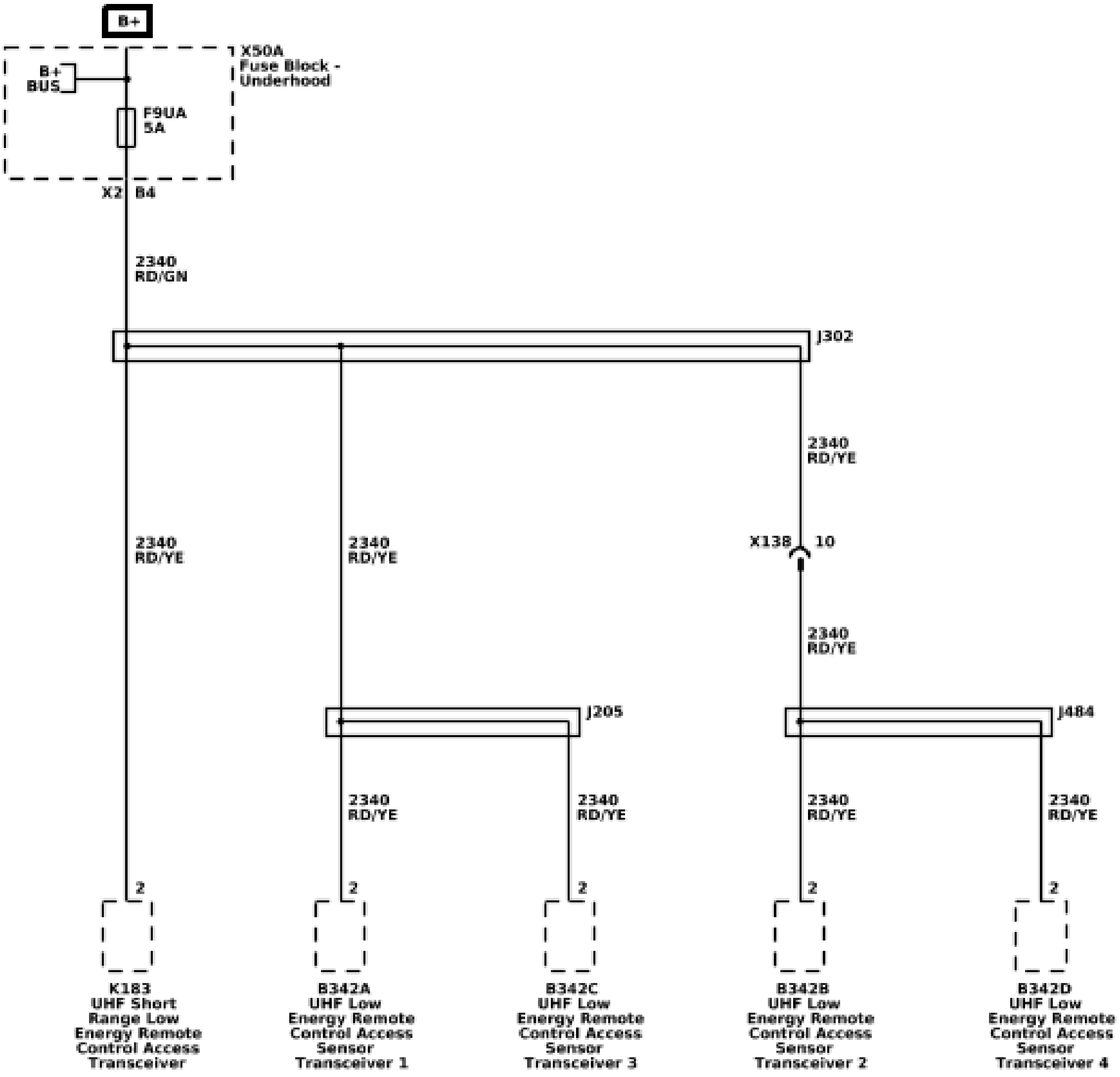
Power Distribution Schematics (F1UA, F2UA, F3UA, F4UA, F27UA, F32UA, and F33UA Fuses (Z88))


B+
B+ BUS
X50A Fuse Block - Underhood
KR48 Headlamp High Beam Relay
86
30
KR50 Headlamp Relay
87
KR3 Horn Relay
30
KR5 Rear Defogger Relay
87
F1UA 10A
F2UA 10A
F3UA 20A
F4UA 20A
F27UA 15A
F32UA 30A
F33UA 15A
X2
A3
A4
A5
A6
G1
X1
G2
G3
DEZ/DLF
293 BN/VT
2267 BN/YE
J208
711 WH
2227 YE
311 WH
2226 YE/GY
29 BN/GY
2267 BN/YE
2267 BN/YE
X110 4
2
X120 4
2
X500 14
X600 38
711 BK
2227 BK
311 BK
2226 BK
2267 BN/YE
2267 BN/YE
X510 7
X610 7
X1 1
GFF/ GFI/GFJ
GFF/ GFI/GFJ
GFG/ GFU/GFW
GFG/ GFU/GFW
12
11
GFF/ GFI/GFJ
GFF/ GFI/GFJ
GFG/ GFU/GFW
GFG/ GFU/GFW
12
11
2
A9A Outside Rearview Mirror - Driver
2267 BN/YE
X1 A
A9B Outside Rearview Mirror - Passenger
2267 BN/YE
X1 A
A90 Logic
K166L Multifunction LED Control Module - Left Headlamp
A90 Logic
K166R Multifunction LED Control Module - Right Headlamp
P12 Horn
E18 Rear Defogger Grid
E17D Outside Rearview Mirror Glass - Driver
E17P Outside Rearview Mirror Glass - Passenger
E13LA Headlamp Assembly - Left
E13RA Headlamp Assembly - Right
L O C
5502211

Power Distribution Schematics (F8UA, F13UA, F53UA, F73UA, and F81UA Fuses)

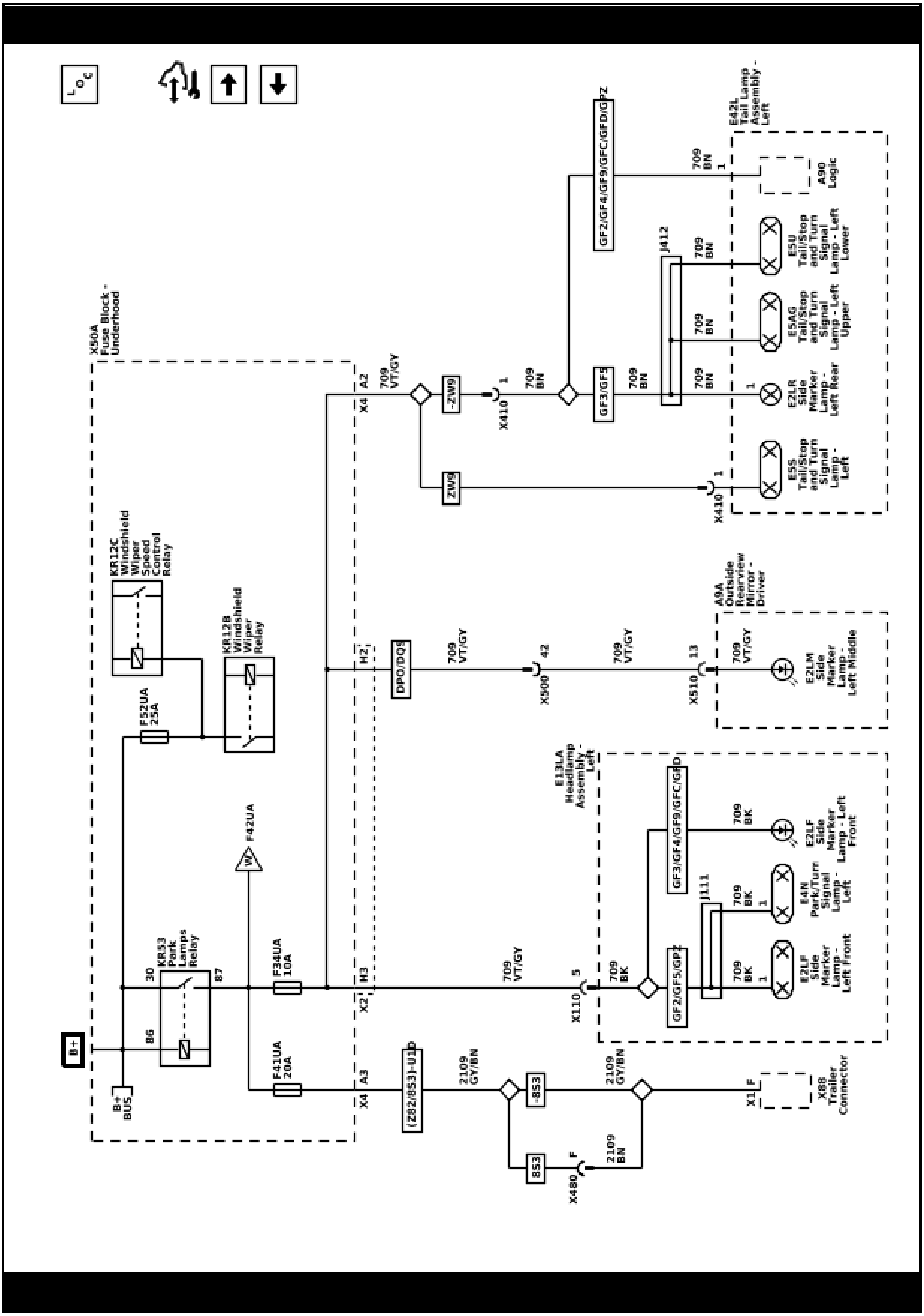

B+
B+ BUS
X50A Fuse Block - Underhood
KR63L Trailer Stop/Turn Signal Lamp Relay - Left
KR63R Trailer Stop/Turn Signal Lamp Relay - Right
KR11 Windshield Washer Pump Relay
KR59 Stop Lamp Relay
KR46 Front Fog Lamp Relay
F73UA 10A
F81UA 10A
F13UA 15A
F53UA 10A
F8UA 15A
X4 G3
H3
X1 B5
X4 - A1 (Not Used)
X2 H1
B3
(Z82/8S3)-U1D
(Z82/8S3)-U1D
318 YE/BU
1619 GN/VT
-8S3
8S3
8S3
-8S3
X480 G
D
318 YE/BU
1618 YE
1619 GN
1619 GN/VT
X1 G
D
X88 Trailer Connector
228 GY/VT
1
G24 Windshield Washer Pump
1054 VT/GY
X275 73
1054 VT/GY
X256 39
5065 VT/WH
X380 2
5065 VT/WH
2
E6 Center High Mounted Stop Lamp
2234 BN/VT
S3U
T3U
X100 9
2234 BN/VT
J102
2234 BN/VT
2234 BN/VT
1
1
E29LF Fog Lamp - Left Front
E29RF Fog Lamp - Right Front
L O C
5502212

Power Distribution Schematics (F9UA Fuse (BOP))


B+
B+ BUS
X50A Fuse Block - Underhood
F9UA 5A
X2 B4
2340 RD/GN
J302
2340 RD/YE
2340 RD/YE
2340 RD/YE
X138 10
2340 RD/YE
J205
J484
2340 RD/YE
2340 RD/YE
2340 RD/YE
2340 RD/YE
2
2
2
2
2
K183 UHF Short Range Low Energy Remote Control Access Transceiver
B342A UHF Low Energy Remote Control Access Sensor Transceiver 1
B342C UHF Low Energy Remote Control Access Sensor Transceiver 3
B342B UHF Low Energy Remote Control Access Sensor Transceiver 2
B342D UHF Low Energy Remote Control Access Sensor Transceiver 4

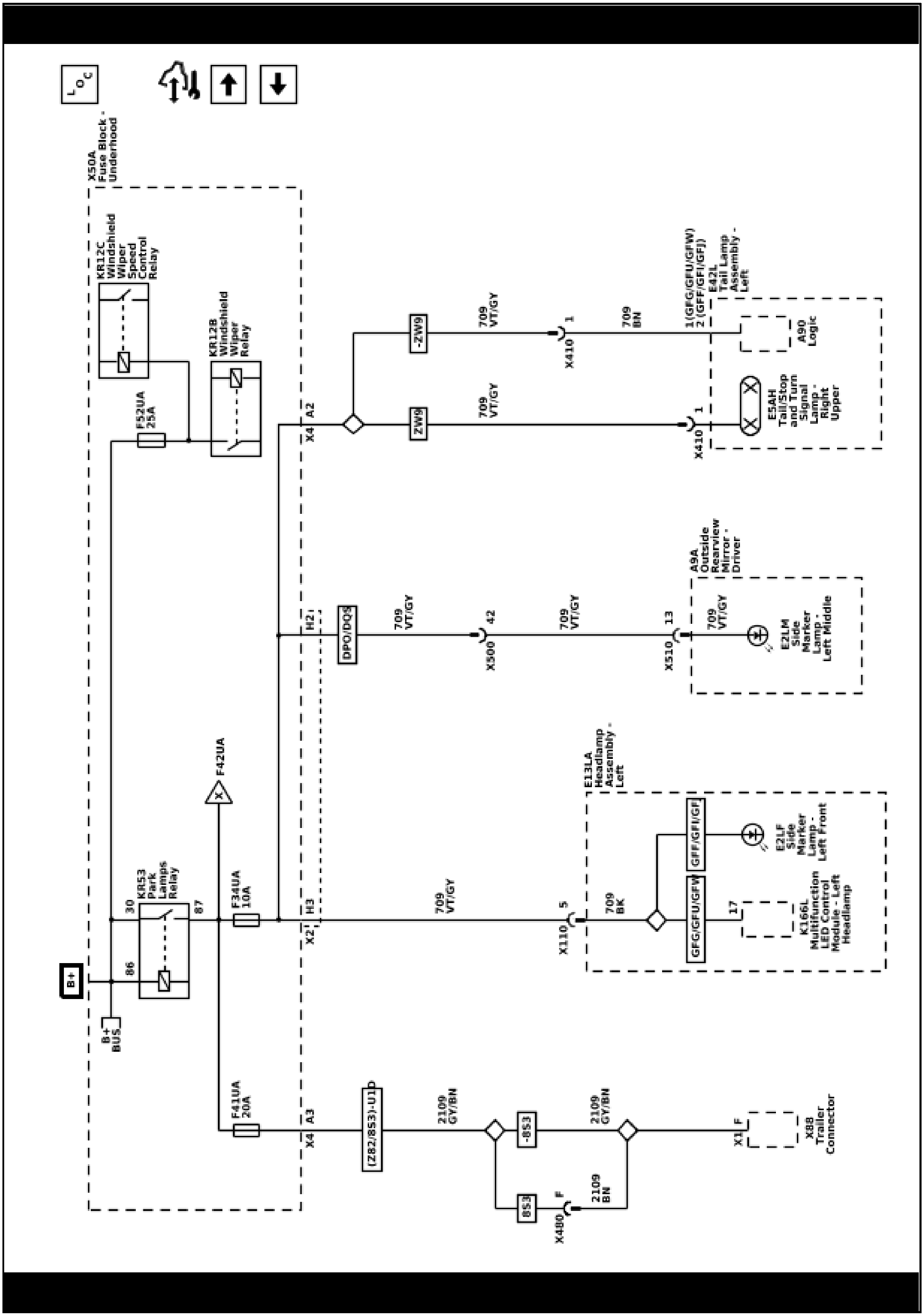
5502213

Power Distribution Schematics (F34UA, F41UA, and F52UA Fuses (X88))

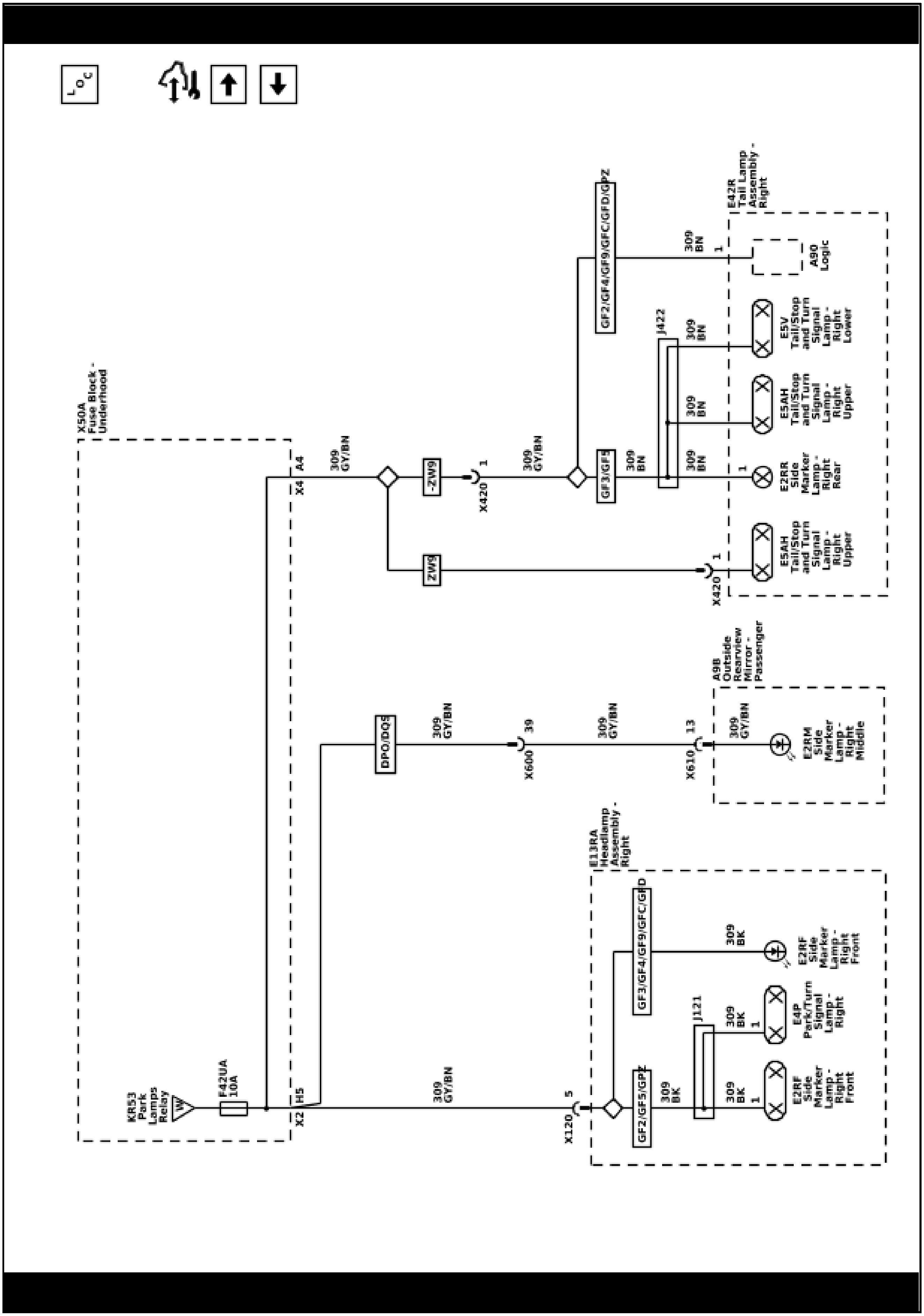

B+
B+ BUS
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
86
30
87
F41UA 20A
F34UA 10A
F52UA 25A
F42UA
W
KR12B Windshield Wiper Relay
KR12C Windshield Wiper Speed Control Relay
X4 A3
X2 H3
H2
X4 A2
(Z82/8S3)-U1D
2109 GY/BN
-8S3
8S3
X480 F
2109 BN
X1 F
X88 Trailer Connector
709 VT/GY
X110 5
709 BK
GF2/GF5/GP2
J111
GF3/GF4/GF9/GFC/GFD
E13LA Headlamp Assembly - Left
1
E2LF Side Marker Lamp - Left Front
E4N Park/Turn Signal Lamp - Left
E2LF Side Marker Lamp - Left Front
DPO/DQS
X500 42
X510 13
A9A Outside Rearview Mirror - Driver
E2LM Side Marker Lamp - Left Middle
ZW9
-ZW9
X410 1
709 BN
GF3/GF5
J412
GF2/GF4/GF9/GFC/GFD/GPZ
E42L Tail Lamp Assembly - Left
E5S Tail/Stop and Turn Signal Lamp - Left
E2LR Side Marker Lamp - Left Rear
E5AG Tail/Stop and Turn Signal Lamp - Left Upper
E5U Tail/Stop and Turn Signal Lamp - Left Lower
A90 Logic
L O C

5502214

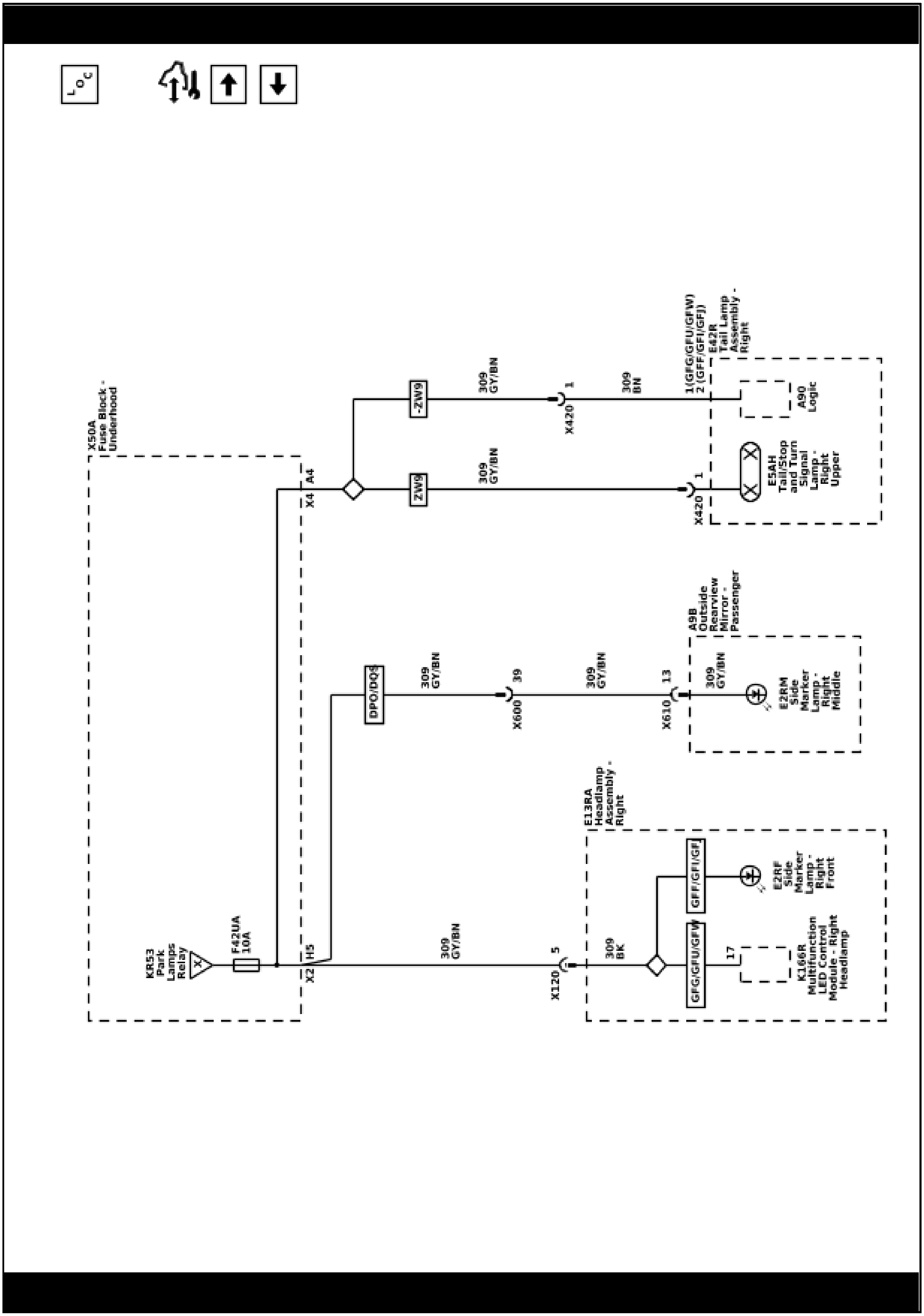
Power Distribution Schematics (F34UA, F41UA, and F52UA Fuses (Z88))


5502215
B+
B+ BUS
X50A Fuse Block - Underhood
KR12C Windshield Wiper Speed Control Relay
KR12B Windshield Wiper Relay
F52UA 25A
KR53 Park Lamps Relay
30
86
87
F34UA 10A
F42UA
F41UA 20A
X4 A2
H2
X2 H3
X4 A3
-ZW9
ZW9
DPO/DQS
(Z82/8S3)-U1D
709 VT/GY
709 BN
709 BK
2109 GY/BN
2109 BN
X410 1
X500 42
X510 13
X110 5
X480 F
-8S3
8S3
1(GFG/GFU/GFW) 2(GFF/GFI/GFJ)
E42L Tail Lamp Assembly - Left
A90 Logic
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
A9A Outside Rearview Mirror - Driver
E2LM Side Marker Lamp - Left Middle
E13LA Headlamp Assembly - Left
GFG/GFU/GFW
GFF/GFI/GFJ
17
K166L Multifunction LED Control Module - Left Headlamp
E2LF Side Marker Lamp - Left Front
X1 F
X88 Trailer Connector

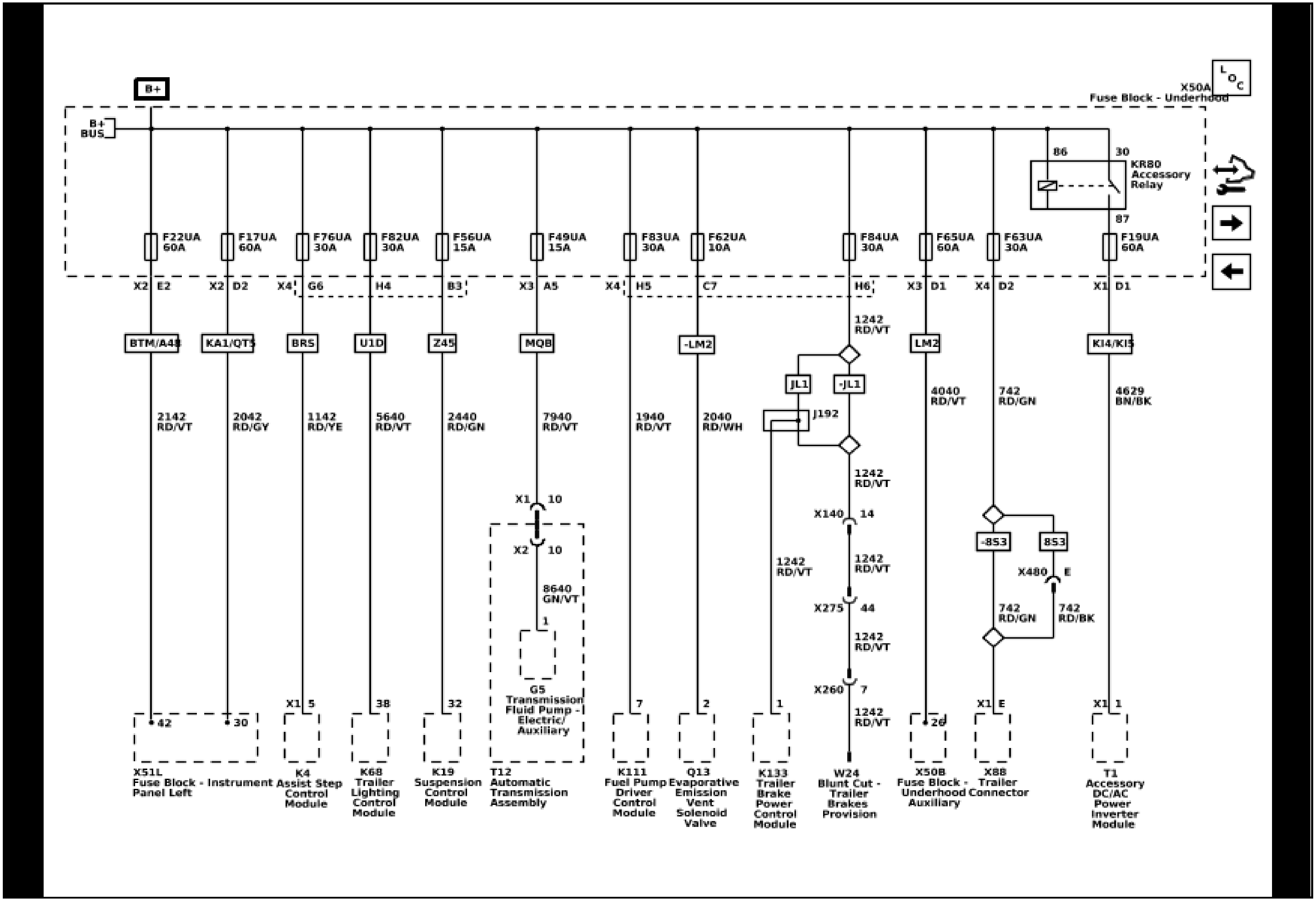
Power Distribution Schematics (F42UA Fuse (X88))


5502216
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
F42UA 10A
X2 H5
X4 A4
309 GY/BN
DPO/DQS
X600 39
X610 13
A98 Outside Rearview Mirror - Passenger
E2RM Side Marker Lamp - Right Middle
-ZW9
ZW9
X420 1
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GPZ
309 BN
J422
E42R Tail Lamp Assembly - Right
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E2RR Side Marker Lamp - Right Rear
E5V Tail/Stop and Turn Signal Lamp - Right Lower
A90 Logic
1
X120 5
E13RA Headlamp Assembly - Right
GF2/GF5/GPZ
GF3/GF4/GF9/GFC/GFD
309 BK
J121
E4P Park/Turn Signal Lamp - Right
E2RF Side Marker Lamp - Right Front

Power Distribution Schematics (F42UA Fuse (Z88))

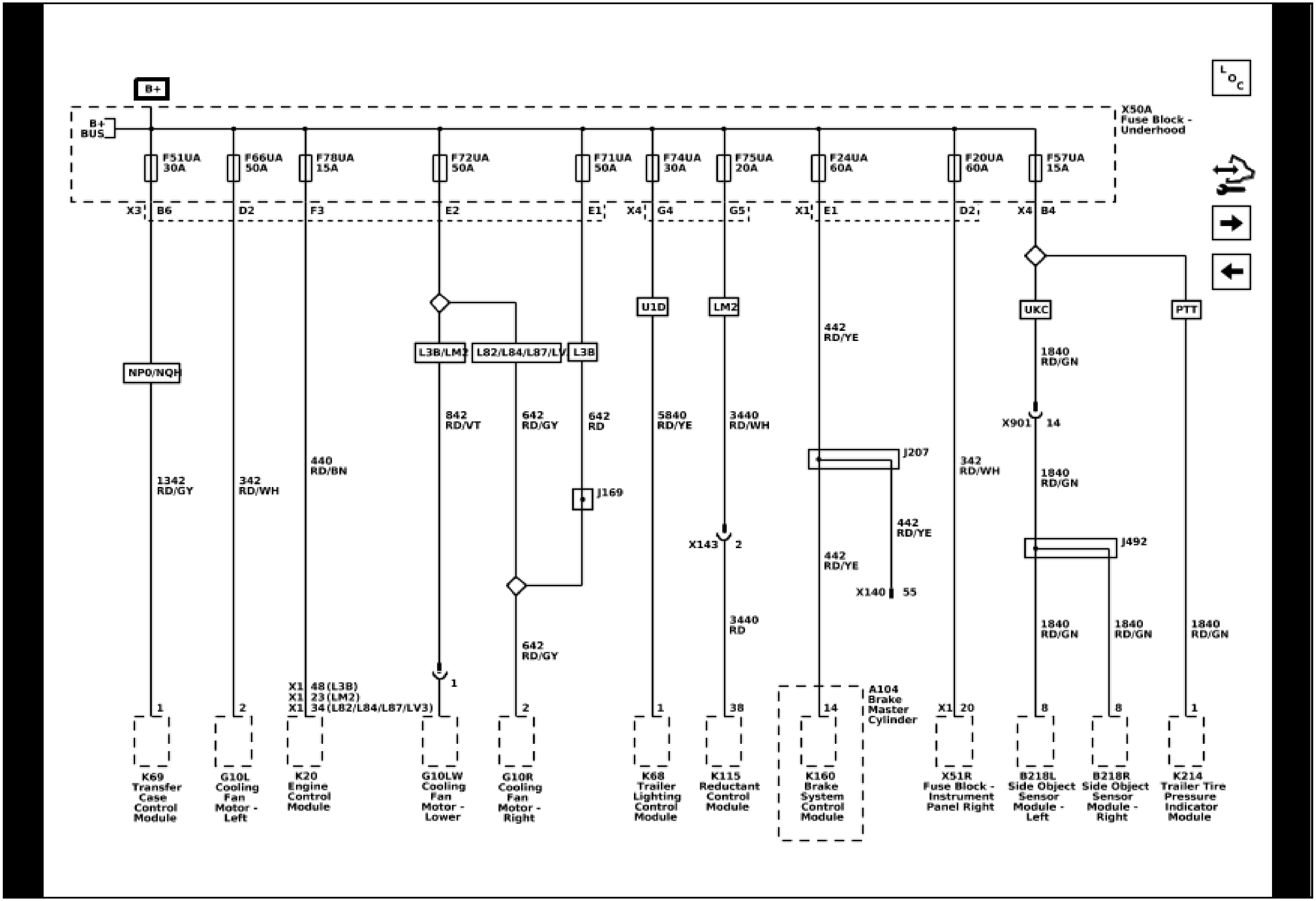

5502217
X50A
Fuse Block - Underhood
KR53
Park
Lamps
Relay
X
F42UA
10A
X2 H5
X4 A4
ZW9
-ZW9
DPO/DQS
309
GY/BN
309
BK
309
BN
X120 5
X600 39
X610 13
X420 1
X420 1
E13RA
Headlamp
Assembly -
Right
GFG/GFU/GFW
GFF/GFI/GFJ
17
K166R
Multifunction
LED Control
Module - Right
Headlamp
E2RF
Side
Marker
Lamp -
Right
Front
A9B
Outside
Rearview
Mirror -
Passenger
E2RM
Side
Marker
Lamp -
Right
Middle
1(GFG/GFU/GFW)
2 (GFF/GFI/GFJ)
E42R
Tail Lamp
Assembly -
Right
E5AH
Tail/Stop
and Turn
Signal
Lamp -
Right
Upper
A90
Logic

Power Distribution Schematics (F17UA, F19UA, F22UA, F49UA, F56UA, F62UA, F63UA, F65UA, F76UA, F82UA, F83UA, and F84UA Fuses)

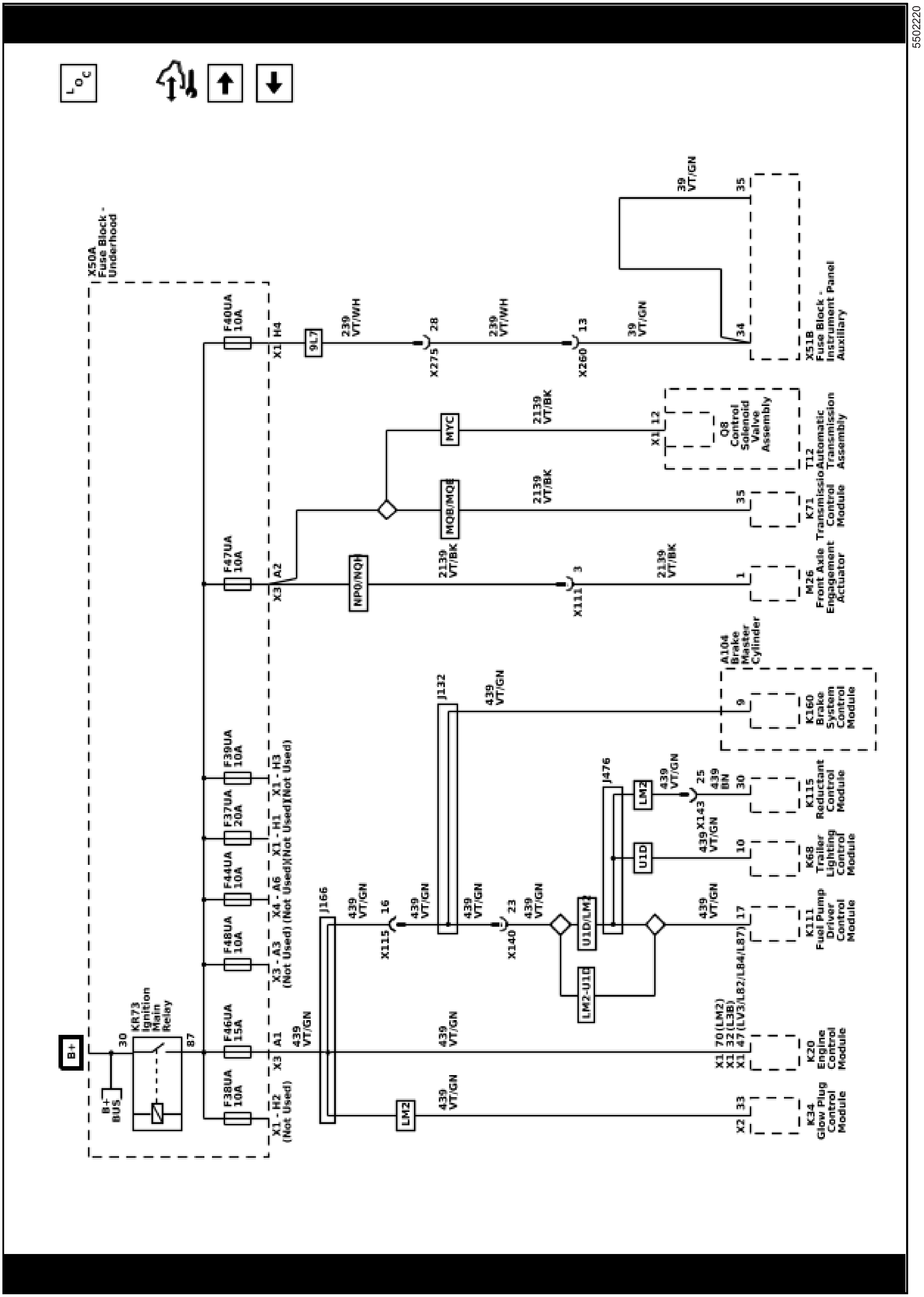

B+
B+ BUS
X50A Fuse Block - Underhood
86
30
87
KR80 Accessory Relay
F22UA 60A
F17UA 60A
F76UA 30A
F82UA 30A
F56UA 15A
F49UA 15A
F83UA 30A
F62UA 10A
F84UA 30A
F65UA 60A
F63UA 30A
F19UA 60A
X2 E2
X2 D2
X4 G6
H4
B3
X3 A5
X4 H5
C7
H6
X3 D1
X4 D2
X1 D1
BTM/A48
KA1/QT5
BRS
U1D
Z45
MQB
-LM2
JL1
-JL1
J192
LM2
KI4/KI5
-853
853
2142 RD/VT
2042 RD/GY
1142 RD/YE
5640 RD/VT
2440 RD/GN
7940 RD/VT
1940 RD/VT
2040 RD/WH
1242 RD/VT
4040 RD/VT
742 RD/GN
742 RD/BK
4629 BN/BK
8640 GN/VT
X1 10
X2 10
X140 14
X275 44
X260 7
X480 E
42
30
X1 5
38
32
1
7
2
1
26
X1 E
X1 1
X51L Fuse Block - Instrument Panel Left
K4 Assist Step Control Module
K68 Trailer Lighting Control Module
K19 Suspension Control Module
G5 Transmission Fluid Pump - Electric/ Auxiliary
T12 Automatic Transmission Assembly
K111 Fuel Pump Driver Control Module
Q13 Evaporative Emission Vent Solenoid Valve
K133 Trailer Brake Power Control Module
W24 Blunt Cut - Trailer Brakes Provision
X50B Fuse Block - Underhood Auxiliary
X88 Trailer Connector
T1 Accessory DC/AC Power Inverter Module

5502218

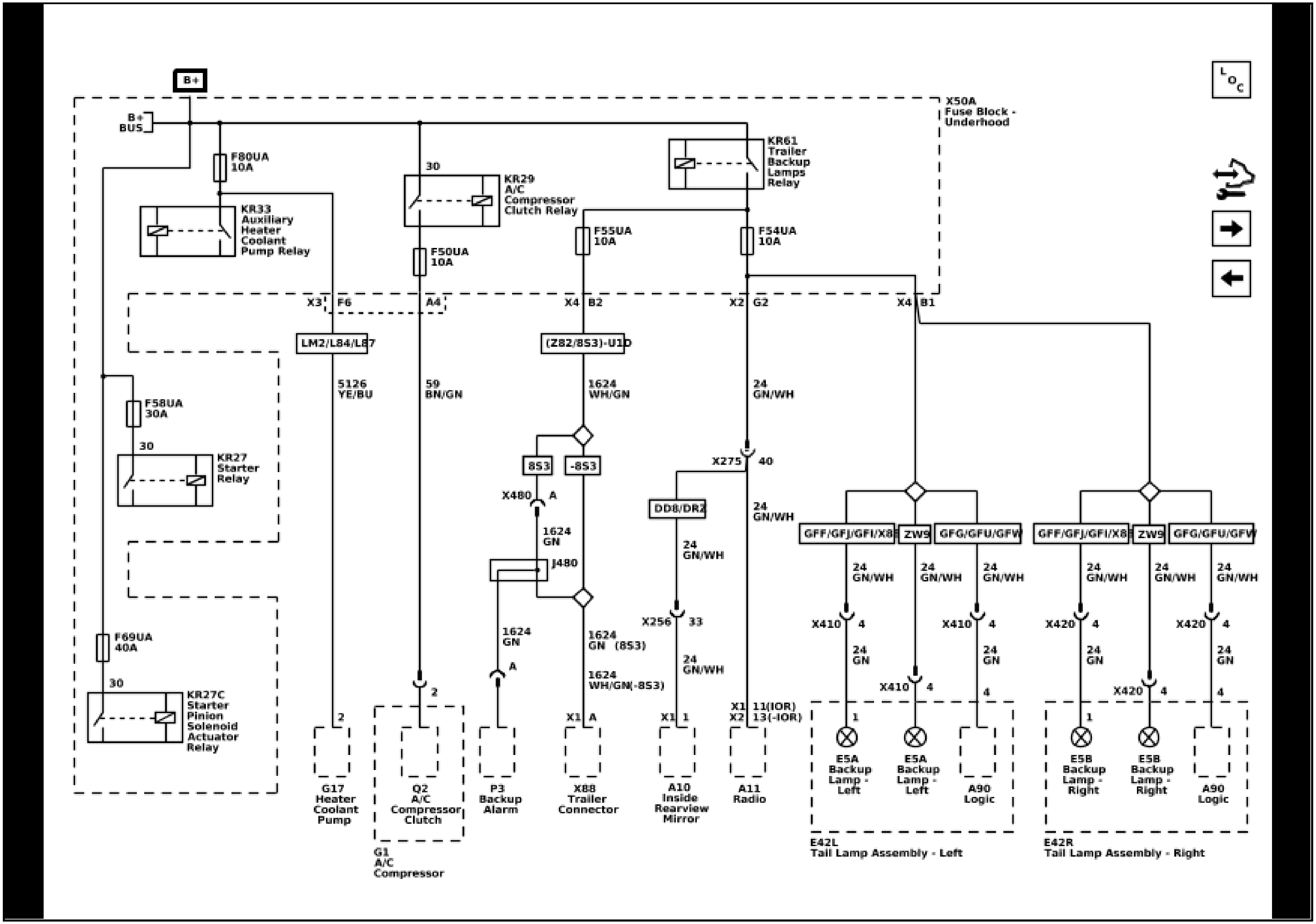
Power Distribution Schematics (F20UA, F24UA, F51UA, F57UA, F66UA, F71UA, F72UA, F74UA, F75UA, and F78UA Fuses)


B+
B+ BUS
X50A Fuse Block - Underhood
F51UA 30A
F66UA 50A
F78UA 15A
F72UA 50A
F71UA 50A
F74UA 30A
F75UA 20A
F24UA 60A
F20UA 60A
F57UA 15A
X3 B6
D2
F3
E2
E1
X4 G4
G5
X1 E1
D2
X4 B4
NP0/NQH
1342 RD/GY
342 RD/WH
440 RD/BN
L3B/LM2
L82/L84/L87/LV
L3B
842 RD/VT
642 RD/GY
642 RD
J169
642 RD/GY
U1D
5840 RD/YE
LM2
3440 RD/WH
X143 2
3440 RD
442 RD/YE
J207
442 RD/YE
X140 55
442 RD/YE
342 RD/WH
UKC
1840 RD/GN
X901 14
1840 RD/GN
J492
1840 RD/GN
1840 RD/GN
PTT
1840 RD/GN
1
2
X1 48 (L3B)
X1 23 (LM2)
X1 34 (L82/L84/L87/LV3)
1
2
1
38
14
A104 Brake Master Cylinder
X1 20
8
8
1
K69 Transfer Case Control Module
G10L Cooling Fan Motor - Left
K20 Engine Control Module
G10LW Cooling Fan Motor - Lower
G10R Cooling Fan Motor - Right
K68 Trailer Lighting Control Module
K115 Reductant Control Module
K160 Brake System Control Module
X51R Fuse Block - Instrument Panel Right
B218L Side Object Sensor Module - Left
B218R Side Object Sensor Module - Right
K214 Trailer Tire Pressure Indicator Module
L O C
5502219

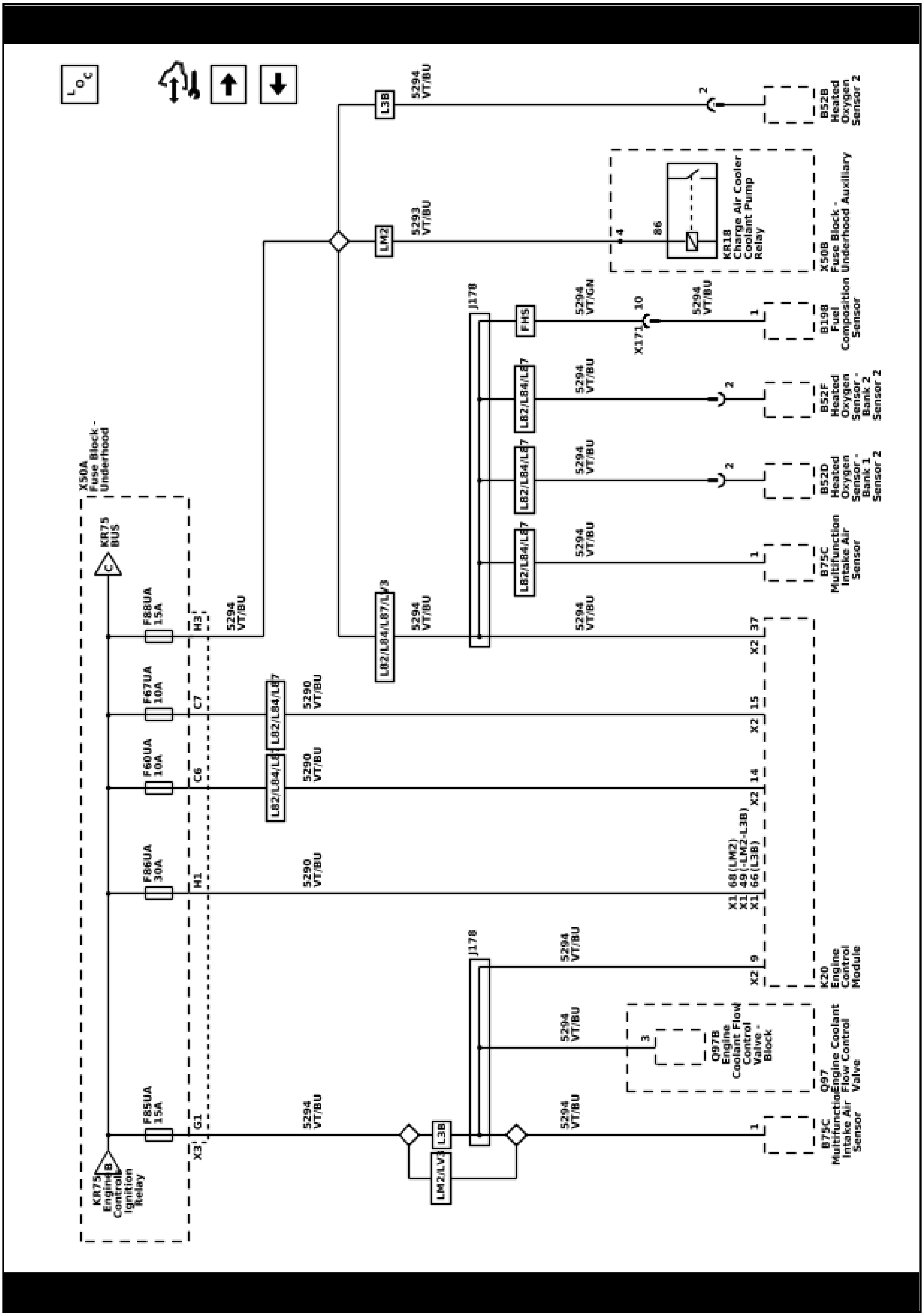
Power Distribution Schematics (F37UA, F38UA, F39UA, F40UA, F44UA, F46UA, F47UA, and F48UA Fuses)


5502220
X50A Fuse Block - Underhood
B+
B+ BUS
30
KR73 Ignition Main Relay
87
F38UA 10A
F46UA 15A
F48UA 10A
F44UA 10A
F37UA 20A
F39UA 10A
F47UA 10A
F40UA 10A
X1 - H2 (Not Used)
X3 A1
X3 - A3 (Not Used)
X4 - A6 (Not Used)
X1 - H1 (Not Used)
X1 - H3 (Not Used)
X3 A2
X1 H4
9L7
239 VT/WH
X275 28
X260 13
39 VT/GN
34
35
X51B Fuse Block - Instrument Panel Auxiliary
MYC
2139 VT/BK
X1 12
Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly
MQB/MQE
K71 Transmission Control Module
NP0/NQH
X111 3
1
M26 Front Axle Engagement Actuator
A104 Brake Master Cylinder
J132
439 VT/GN
9
K160 Brake System Control Module
J476
LM2
X143 25
439 BN
30
K115 Reductant Control Module
U1D
10
K68 Trailer Lighting Control Module
J166
X115 16
X140 23
U1D/LM2
LM2-U1D
17
K111 Fuel Pump Driver Control Module
X1 70 (LM2)
X1 32 (L3B)
X1 47 (LV3/L82/L84/L87)
K20 Engine Control Module
X2 33
K34 Glow Plug Control Module

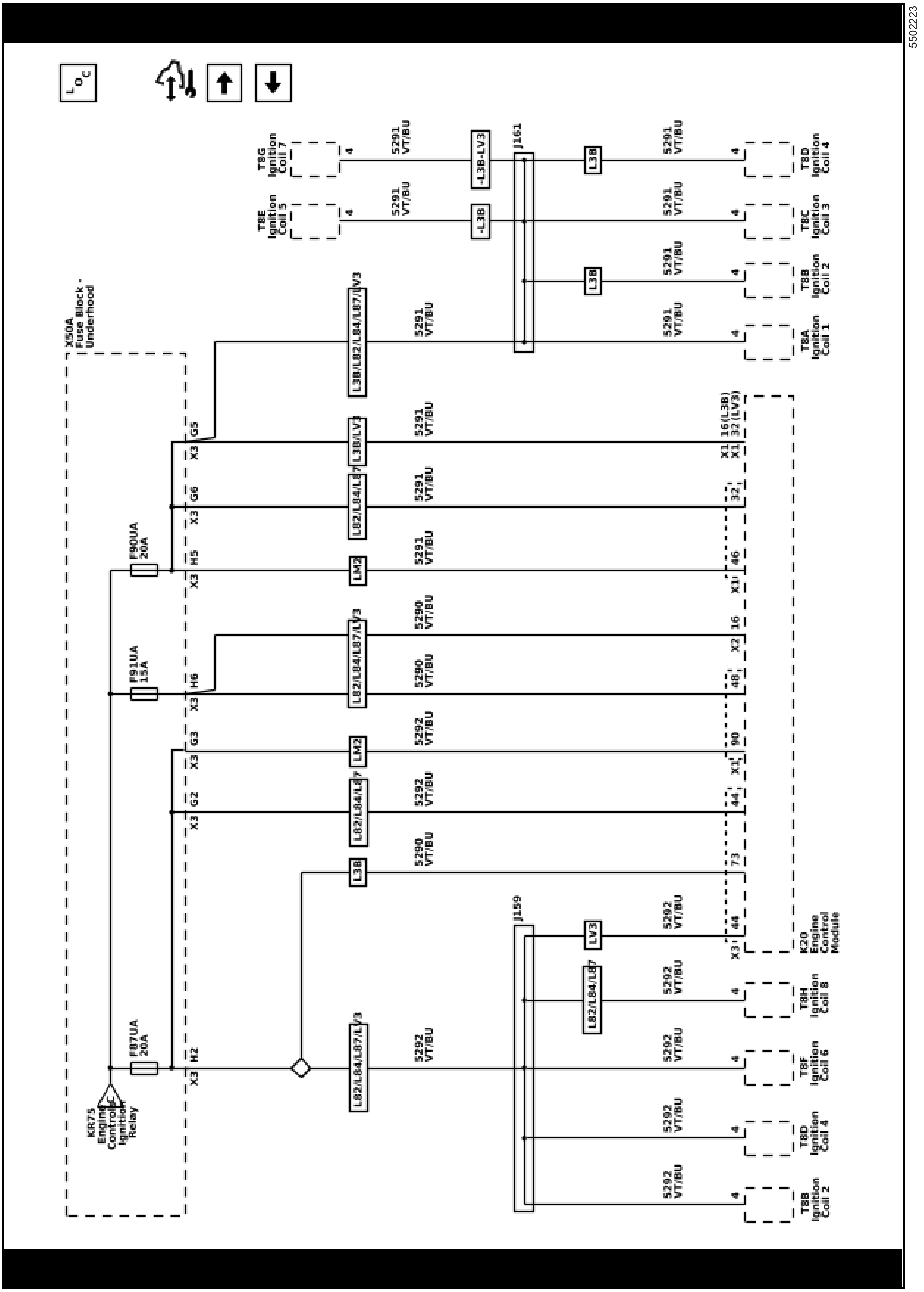
Power Distribution Schematics (F50UA, F54UA, F55UA, F58UA, F69UA, and F80UA Fuses)


B+
B+ BUS
X50A Fuse Block - Underhood
F80UA 10A
KR33 Auxiliary Heater Coolant Pump Relay
30
KR29 A/C Compressor Clutch Relay
KR61 Trailer Backup Lamps Relay
F50UA 10A
F55UA 10A
F54UA 10A
X3 F6
A4
X4 B2
X2 G2
X4 B1
LM2/L84/L87
(Z82/8S3)-U1D
5126 YE/BU
59 BN/GN
1624 WH/GN
24 GN/WH
F58UA 30A
30
KR27 Starter Relay
8S3
-8S3
X480 A
1624 GN
J480
X275 40
DD8/DR2
24 GN/WH
GFF/GFJ/GFI/X88
ZW9
GFG/GFU/GFW
X410 4
X420 4
24 GN
F69UA 40A
30
KR27C Starter Pinion Solenoid Actuator Relay
2
1624 GN A
1624 GN (8S3)
1624 WH/GN(-8S3)
X256 33
X1 A
X1 1
X1 11(IOR)
X2 13(-IOR)
1
G17 Heater Coolant Pump
Q2 A/C Compressor Clutch
G1 A/C Compressor
P3 Backup Alarm
X88 Trailer Connector
A10 Inside Rearview Mirror
A11 Radio
E5A Backup Lamp - Left
A90 Logic
E42L Tail Lamp Assembly - Left
E5B Backup Lamp - Right
E42R Tail Lamp Assembly - Right
L O C
5502221

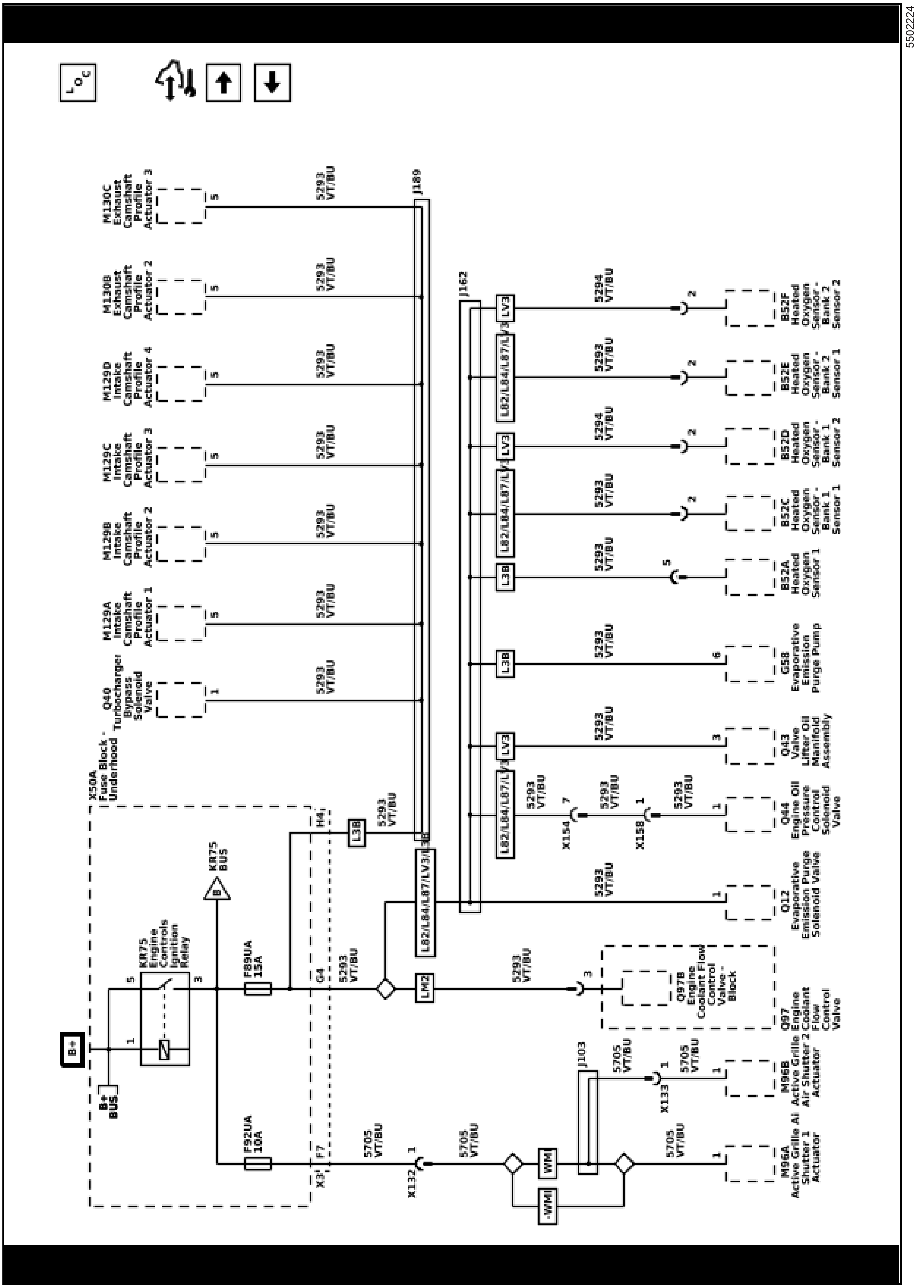
Power Distribution Schematics (F60UA, F67UA, F85UA, F86UA, and F88UA Fuses)


5502222
X50A Fuse Block - Underhood
KR75 Engine Control Ignition Relay
B
C
KR75 BUS
F85UA 15A
F86UA 30A
F60UA 10A
F67UA 10A
F88UA 15A
X3
G1
H1
C6
C7
H3
5294 VT/BU
5290 VT/BU
5293 VT/BU
5294 VT/GN
LM2/LV3
L3B
LM2
L82/L84/L87
L82/L84/L87/LV3
FHS
J178
X171
10
B75C Multifunction Intake Air Sensor
Q97 Engine Coolant Flow Control Valve
Q97B Engine Coolant Flow Control Valve - Block
K20 Engine Control Module
X2 9
X1 68 (LM2)
X1 49 (-LM2-L3B)
X1 66 (L3B)
X2 14
X2 15
X2 37
B52D Heated Oxygen Sensor - Bank 1 Sensor 2
B52F Heated Oxygen Sensor - Bank 2 Sensor 2
B198 Fuel Composition Sensor
KR18 Charge Air Cooler Coolant Pump Relay
X50B Fuse Block - Underhood Auxiliary
86
4
B52B Heated Oxygen Sensor 2
1
2
3

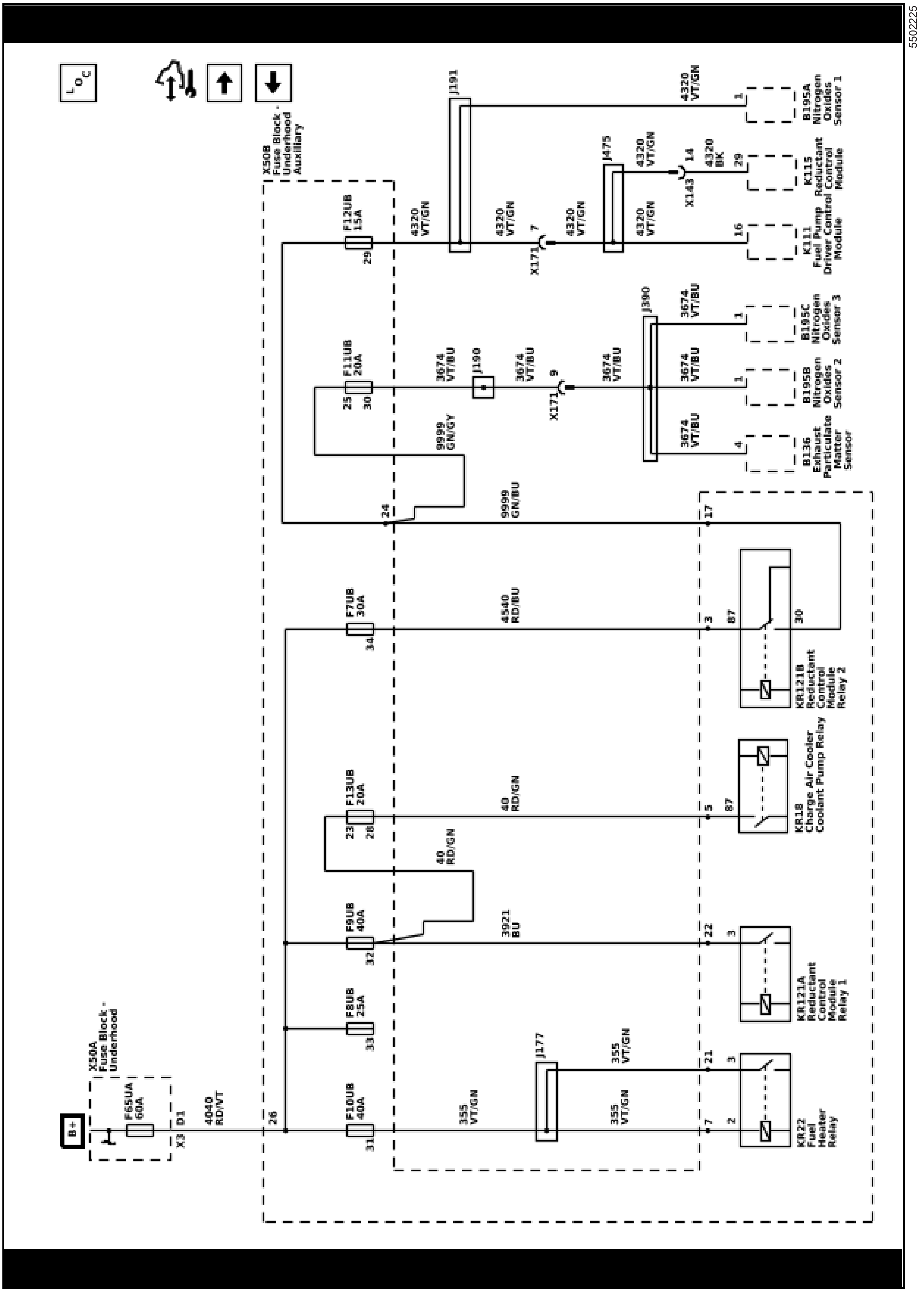
Power Distribution Schematics (F87UA, F90UA, and F91UA Fuses)


5502223
X50A Fuse Block - Underhood
KR75 Engine Control Ignition Relay
F87UA 20A
F91UA 15A
F90UA 20A
X3 H2
X3 G2
X3 G3
X3 H6
X3 H5
X3 G6
X3 G5
L82/L84/L87/LV3
L82/L84/L87
LM2
L3B
L3B/LV3
L3B/L82/L84/L87/LV3
5292 VT/BU
5290 VT/BU
5291 VT/BU
J159
J161
LV3
-L3B
-L3B-LV3
X3 44
73
44
X1 90
48
X2 16
X1 46
32
X1 16(L3B)
X1 32(LV3)
K20 Engine Control Module
4
T8B Ignition Coil 2
T8D Ignition Coil 4
T8F Ignition Coil 6
T8H Ignition Coil 8
T8A Ignition Coil 1
T8C Ignition Coil 3
T8E Ignition Coil 5
T8G Ignition Coil 7

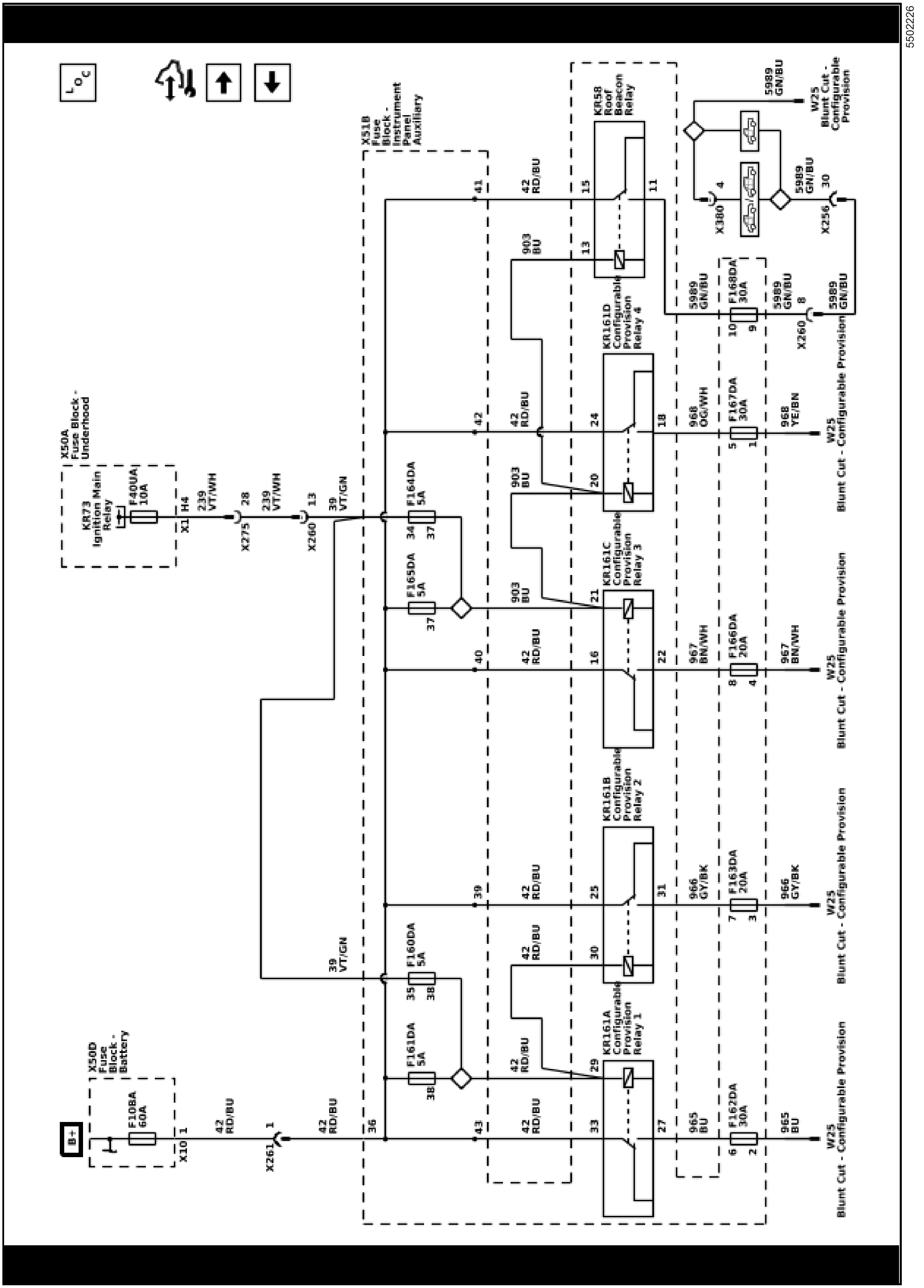
Power Distribution Schematics (F89UA and F92UA Fuses)


5502224
X50A Fuse Block - Underhood
B+
B+ BUS
KR75 Engine Controls Ignition Relay
KR75 BUS
F89UA 15A
F92UA 10A
G4
H4
F7
X3
L3B
LM2
5293 VT/BU
5705 VT/BU
5294 VT/BU
L82/L84/L87/LV3/L3B
J189
J162
J103
X132
X133
X154
X158
WMI
-WMI
Q40 Turbocharger Bypass Solenoid Valve
M129A Intake Camshaft Profile Actuator 1
M129B Intake Camshaft Profile Actuator 2
M129C Intake Camshaft Profile Actuator 3
M129D Intake Camshaft Profile Actuator 4
M130B Exhaust Camshaft Profile Actuator 2
M130C Exhaust Camshaft Profile Actuator 3
Q12 Evaporative Emission Purge Solenoid Valve
Q44 Engine Oil Pressure Control Solenoid Valve
Q43 Valve Lifter Oil Manifold Assembly
G58 Evaporative Emission Purge Pump
B52A Heated Oxygen Sensor 1
B52C Heated Oxygen Sensor - Bank 1 Sensor 1
B52D Heated Oxygen Sensor - Bank 1 Sensor 2
B52E Heated Oxygen Sensor - Bank 2 Sensor 1
B52F Heated Oxygen Sensor - Bank 2 Sensor 2
Q97 Engine Coolant Flow Control Valve
Q97B Engine Coolant Flow Control Valve - Block
M96A Active Grille Air Shutter 1 Actuator
M96B Active Grille Air Shutter 2 Actuator

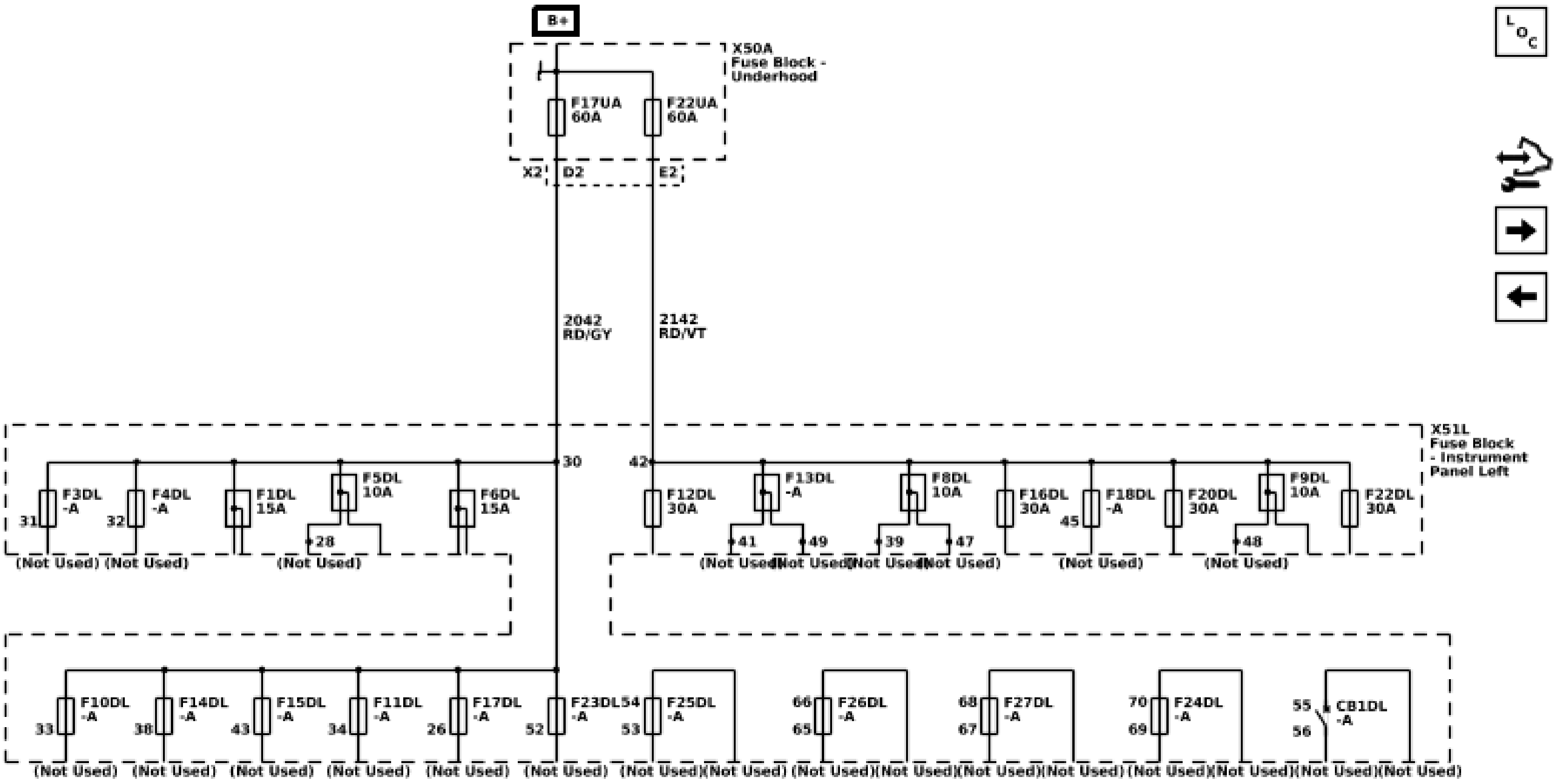
Power Distribution Schematics (Auxiliary Underhood Fuse Block (LM2))


5502225
B+
X50A
Fuse Block - Underhood
F65UA
60A
X3 D1
4040
RD/VT
X50B
Fuse Block - Underhood Auxiliary
26
F10UB
40A
31
F8UB
25A
33
F9UB
40A
32
F13UB
20A
23
28
F7UB
30A
34
F11UB
20A
25
30
F12UB
15A
29
24
355
VT/GN
J177
355
VT/GN
355
VT/GN
3921
BU
40
RD/GN
40
RD/GN
4540
RD/BU
9999
GN/BU
9999
GN/GY
3674
VT/BU
J190
3674
VT/BU
X171
9
3674
VT/BU
J390
3674
VT/BU
3674
VT/BU
3674
VT/BU
4320
VT/GN
J191
4320
VT/GN
X171
7
4320
VT/GN
J475
4320
VT/GN
4320
VT/GN
X143
14
4320
BK
4320
VT/GN
7
21
22
5
3
17
2
3
3
87
87
30
29
16
1
1
1
4
KR22
Fuel Heater Relay
KR121A
Reductant Control Module Relay 1
KR18
Charge Air Cooler Coolant Pump Relay
KR121B
Reductant Control Module Relay 2
B136
Exhaust Particulate Matter Sensor
B195B
Nitrogen Oxides Sensor 2
B195C
Nitrogen Oxides Sensor 3
K111
Fuel Pump Driver Control Module
K115
Reductant Control Module
B195A
Nitrogen Oxides Sensor 1
L O C

Power Distribution Schematics (Auxiliary Instrument Panel Fuse Block (9L7))

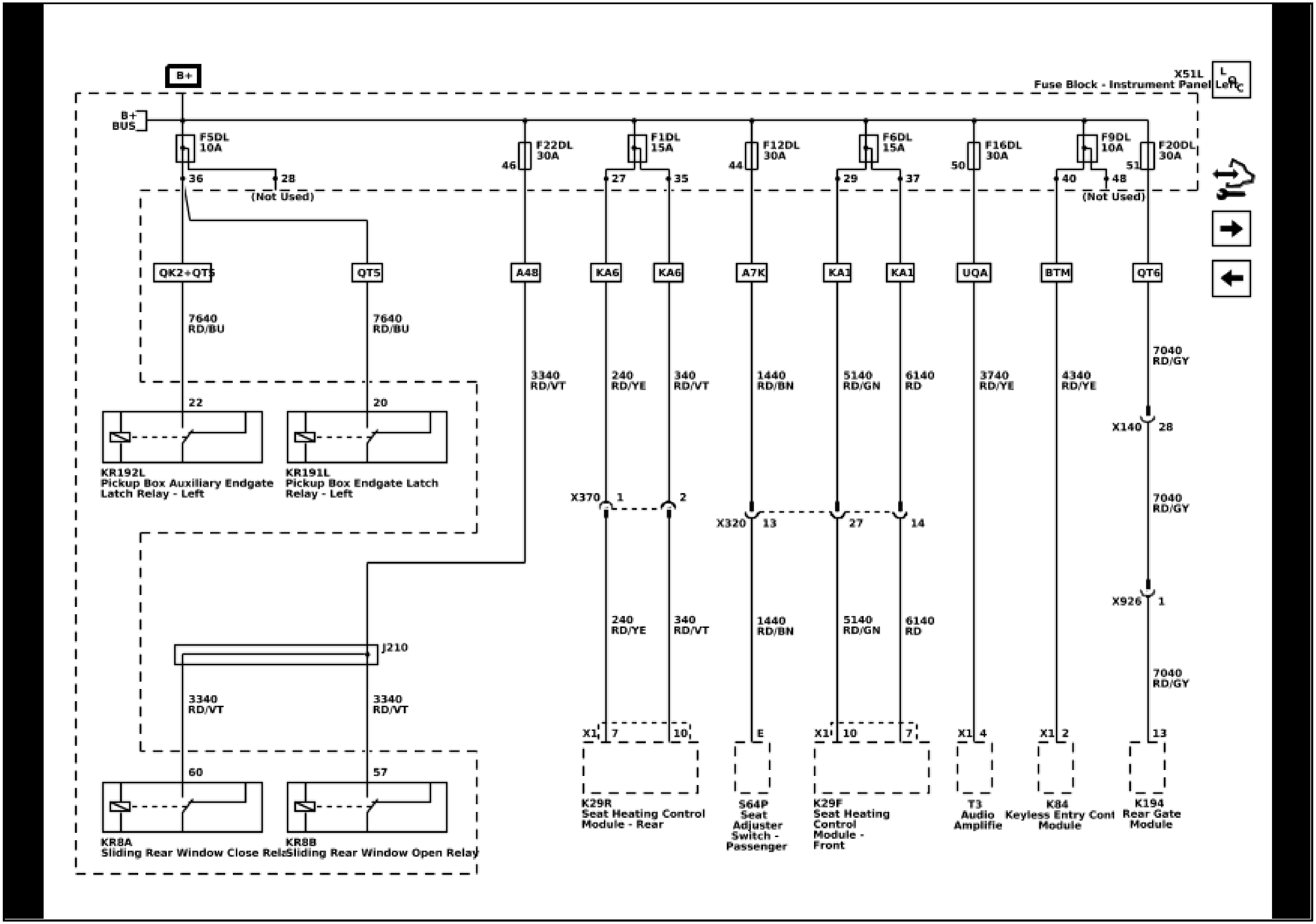

5502226
B+
X50D Fuse Block - Battery
F10BA 60A
X10 1
42 RD/BU
X261 1
36
X51B Fuse Block - Instrument Panel Auxiliary
X50A Fuse Block - Underhood
KR73 Ignition Main Relay
F40UA 10A
X1 H4
239 VT/WH
X275 28
X260 13
39 VT/GN
F164DA 5A
34 37
F165DA 5A
37
F160DA 5A
35 38
F161DA 5A
38
43
39
40
41
42
903 BU
KR161A Configurable Provision Relay 1
KR161B Configurable Provision Relay 2
KR161C Configurable Provision Relay 3
KR161D Configurable Provision Relay 4
KR58 Roof Beacon Relay
33 27 29
30 25 31
21 16 22
20 24 18
13 15 11
965 BU
966 GY/BK
967 BN/WH
968 OG/WH
968 YE/BN
5989 GN/BU
F162DA 30A
6 2
F163DA 20A
7 3
F166DA 20A
8 4
F167DA 30A
5 1
F168DA 30A
10 9
X260 8
X380 4
X256 30
W25 Blunt Cut - Configurable Provision

Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Left)

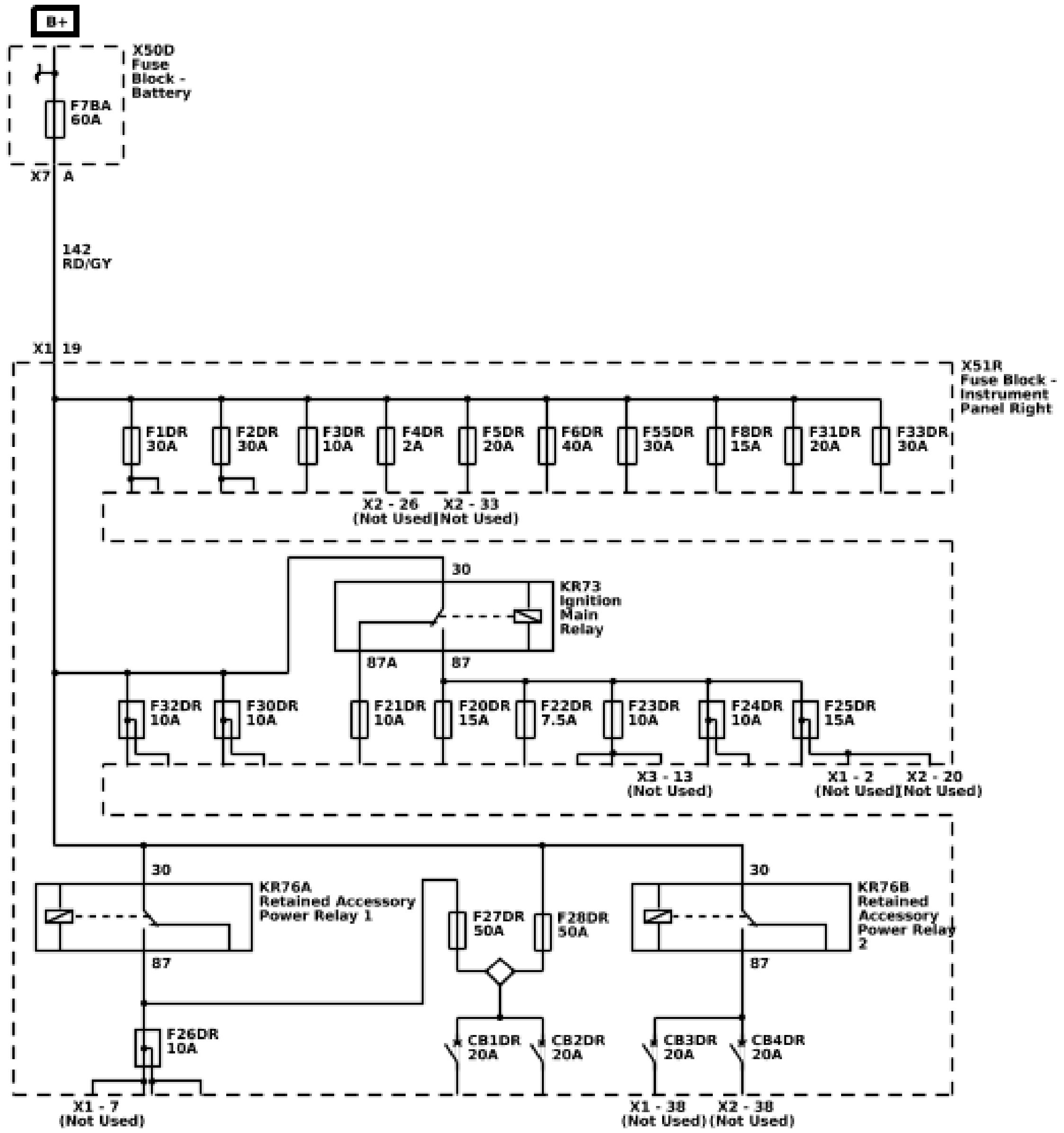

B+
X50A
Fuse Block -
Underhood
F17UA
60A
F22UA
60A
X2
D2
E2
2042
RD/GY
2142
RD/VT
X51L
Fuse Block
- Instrument
Panel Left
30
42
F3DL
-A
31
F4DL
-A
32
F1DL
15A
F5DL
10A
28
F6DL
15A
F12DL
30A
F13DL
-A
41
49
F8DL
10A
39
47
F16DL
30A
F18DL
-A
45
F20DL
30A
F9DL
10A
48
F22DL
30A
(Not Used)
F10DL
-A
33
F14DL
-A
38
F15DL
-A
43
F11DL
-A
34
F17DL
-A
26
F23DL
-A
52
54
53
F25DL
-A
66
65
F26DL
-A
68
67
F27DL
-A
70
69
F24DL
-A
55
56
CB1DL
-A

5502227

Power Distribution Schematics (F1DL, F5DL, F9DL, F12DL, F16DL, F20DL, and F22DL Fuses)

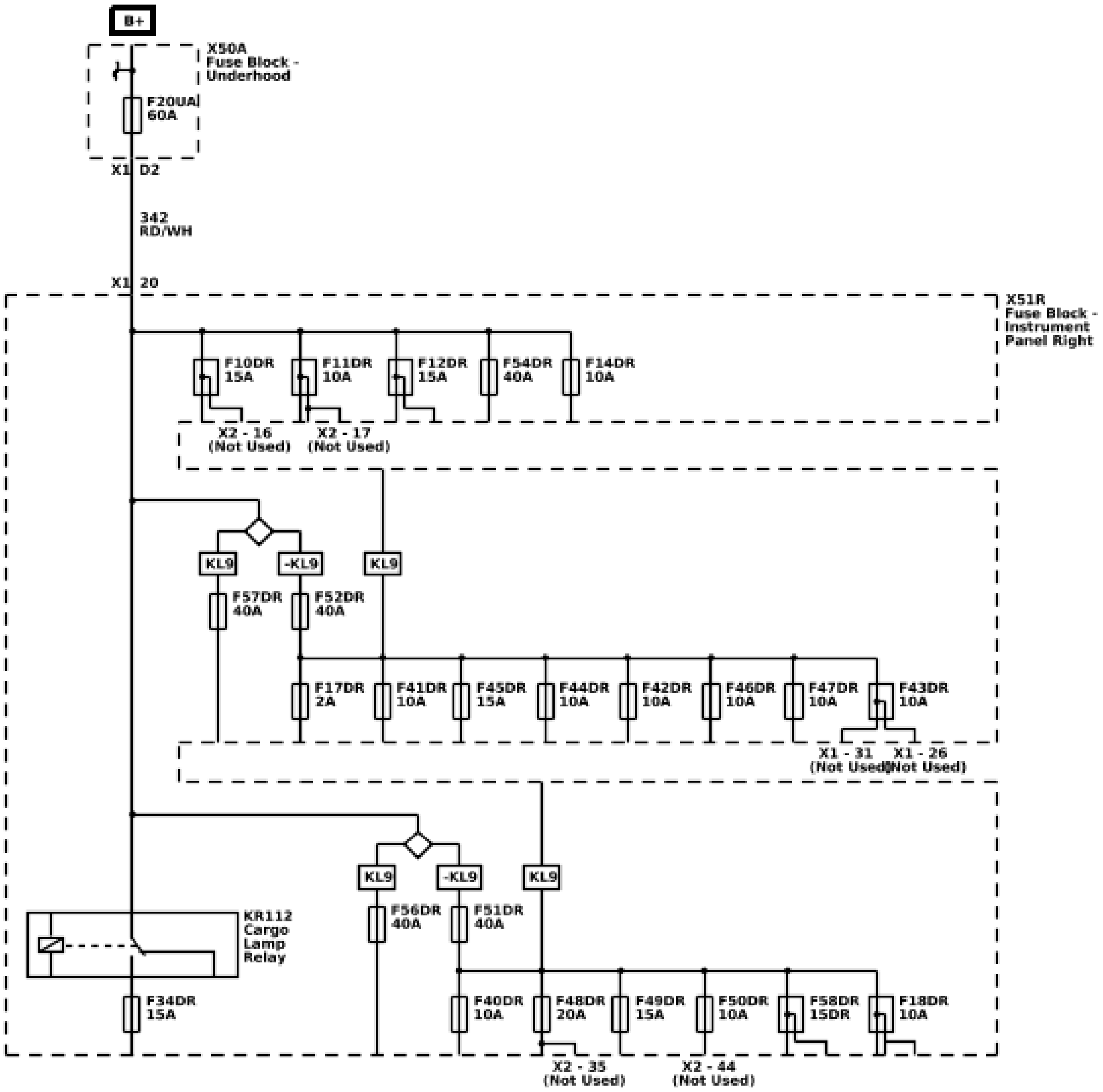

B+
B+ BUS
X51L
Fuse Block - Instrument Panel Left
F5DL 10A
36
28
(Not Used)
F22DL 30A
46
F1DL 15A
27
35
F12DL 30A
44
F6DL 15A
29
37
F16DL 30A
50
F9DL 10A
40
48
(Not Used)
F20DL 30A
51
QK2+QT5
QT5
A48
KA6
KA6
A7K
KA1
KA1
UQA
BTM
QT6
7640 RD/BU
7640 RD/BU
3340 RD/VT
240 RD/YE
340 RD/VT
1440 RD/BN
5140 RD/GN
6140 RD
3740 RD/YE
4340 RD/YE
7040 RD/GY
X140 28
7040 RD/GY
X926 1
7040 RD/GY
22
20
KR192L Pickup Box Auxiliary Endgate Latch Relay - Left
KR191L Pickup Box Endgate Latch Relay - Left
X370 1
2
X320 13
27
14
240 RD/YE
340 RD/VT
1440 RD/BN
5140 RD/GN
6140 RD
J210
3340 RD/VT
3340 RD/VT
60
57
KR8A Sliding Rear Window Close Rela
KR8B Sliding Rear Window Open Relay
X1 7
10
E
X1 10
7
X1 4
X1 2
13
K29R Seat Heating Control Module - Rear
S64P Seat Adjuster Switch - Passenger
K29F Seat Heating Control Module - Front
T3 Audio Amplifie
K84 Keyless Entry Cont Module
K194 Rear Gate Module
5502228

Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Right (1 of 2))


B+
X50D Fuse Block - Battery
F7BA 60A
X7 A
142 RD/GY
X1 19
X51R Fuse Block - Instrument Panel Right
F1DR 30A
F2DR 30A
F3DR 10A
F4DR 2A
F5DR 20A
F6DR 40A
F55DR 30A
F8DR 15A
F31DR 20A
F33DR 30A
X2 - 26 (Not Used)
X2 - 33 (Not Used)
30
KR73 Ignition Main Relay
87A
87
F32DR 10A
F30DR 10A
F21DR 10A
F20DR 15A
F22DR 7.5A
F23DR 10A
F24DR 10A
F25DR 15A
X3 - 13 (Not Used)
X1 - 2 (Not Used)
X2 - 20 (Not Used)
30
KR76A Retained Accessory Power Relay 1
87
F27DR 50A
F28DR 50A
30
KR76B Retained Accessory Power Relay 2
87
F26DR 10A
CB1DR 20A
CB2DR 20A
CB3DR 20A
CB4DR 20A
X1 - 7 (Not Used)
X1 - 38 (Not Used)
X2 - 38 (Not Used)

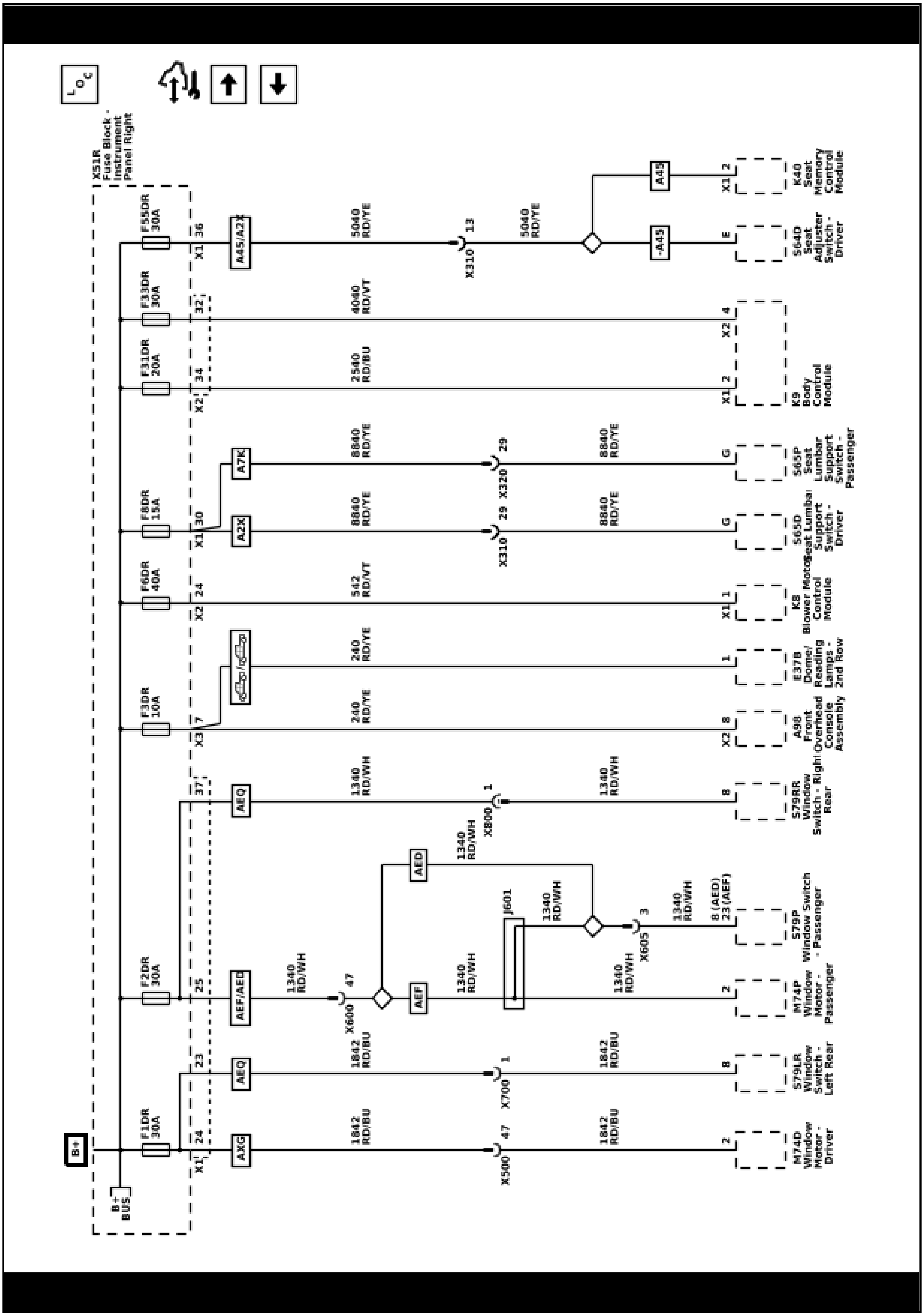
5502229

Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Right (2 of 2))

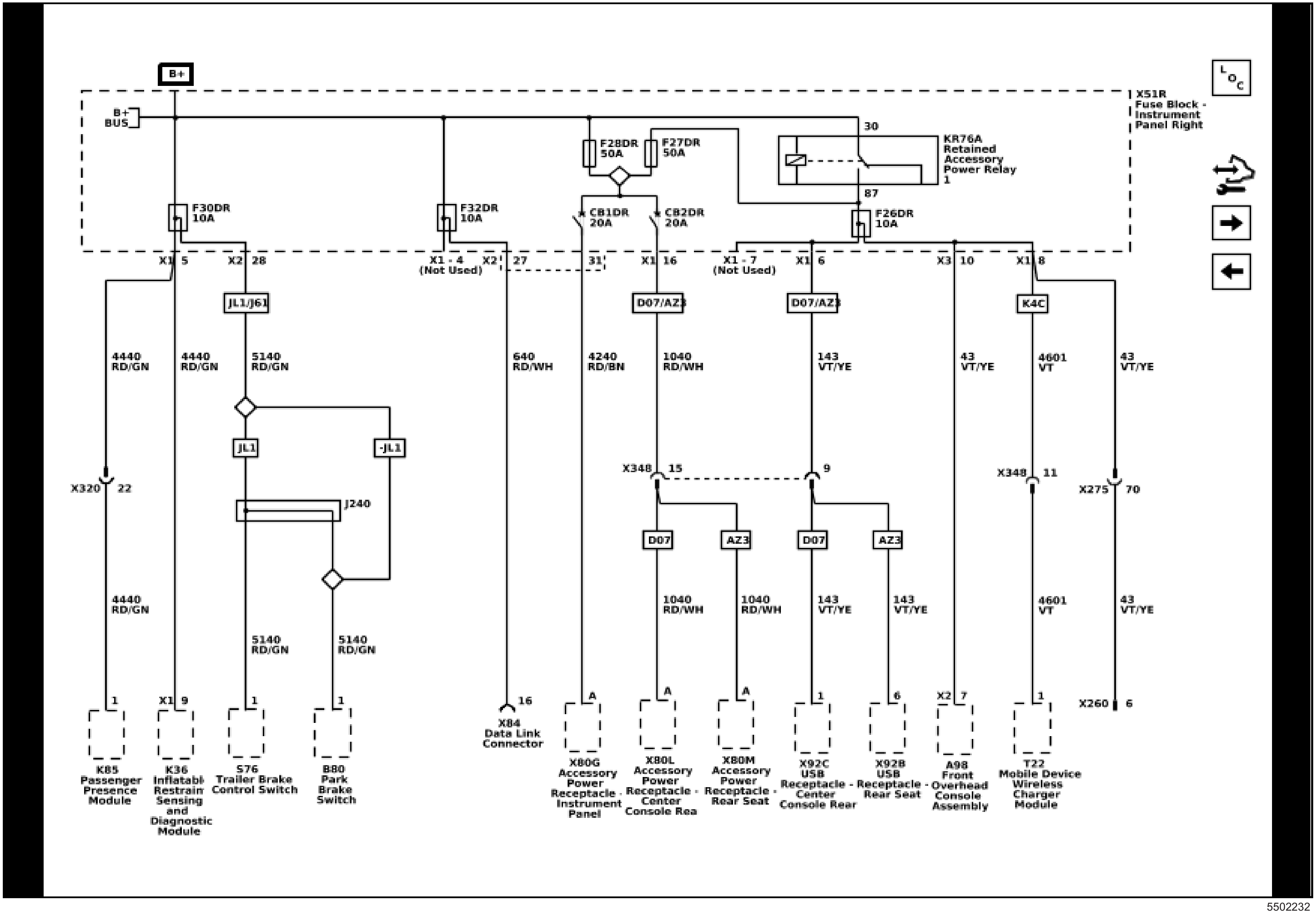

B+
X50A
Fuse Block -
Underhood
F20UA
60A
X1 D2
342
RD/WH
X1 20
X51R
Fuse Block -
Instrument
Panel Right
F10DR
15A
F11DR
10A
F12DR
15A
F54DR
40A
F14DR
10A
X2 - 16
(Not Used)
X2 - 17
(Not Used)
KL9
-KL9
KL9
F57DR
40A
F52DR
40A
F17DR
2A
F41DR
10A
F45DR
15A
F44DR
10A
F42DR
10A
F46DR
10A
F47DR
10A
F43DR
10A
X1 - 31
(Not Used)
X1 - 26
(Not Used)
KL9
-KL9
KL9
KR112
Cargo
Lamp
Relay
F56DR
40A
F51DR
40A
F34DR
15A
F40DR
10A
F48DR
20A
F49DR
15A
F50DR
10A
F58DR
15DR
F18DR
10A
X2 - 35
(Not Used)
X2 - 44
(Not Used)

5502230

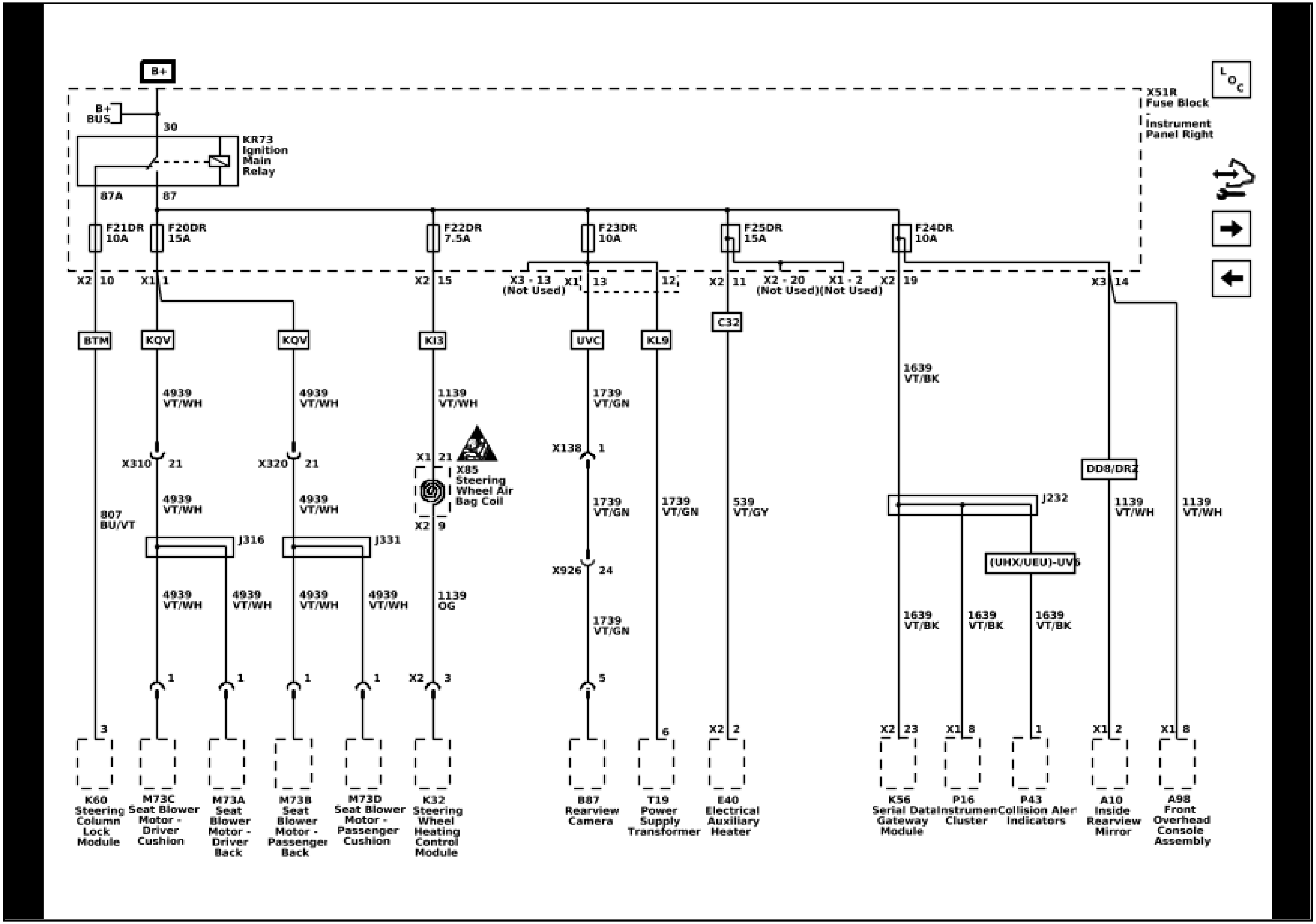
Power Distribution Schematics (F1DR, F2DR, F3DR, F6DR, F8DR, F31DR, F33DR, and F55DR Fuses)


5502231
B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
F1DR 30A
F2DR 30A
F3DR 10A
F6DR 40A
F8DR 15A
F31DR 20A
F33DR 30A
F55DR 30A
X1 24
23
25
37
X3 7
X2 24
X1 30
X2 34
32
X1 36
AXG
AEQ
AEF/AED
AEQ
A7K
A2X
A45/A2X
AED
AEF
J601
A45
-A45
1842 RD/BU
1340 RD/WH
240 RD/YE
542 RD/VT
8840 RD/YE
2540 RD/BU
4040 RD/VT
5040 RD/YE
X500 47
X700 1
X600 47
X800 1
X605 3
X310 29
X320 29
X310 13
2
8
8 (AED) 23 (AEF)
X2 8
1
X1 1
G
X1 2
X2 4
E
X1 2
M74D Window Motor - Driver
S79LR Window Switch - Left Rear
M74P Window Motor - Passenger
S79P Window Switch - Passenger
S79RR Window Switch - Right Rear
A98 Front Overhead Console Assembly
E37B Dome/ Reading Lamps - 2nd Row
K8 Blower Motor Control Module
S65D Seat Lumbar Support Switch - Driver
S65P Seat Lumbar Support Switch - Passenger
K9 Body Control Module
S64D Seat Adjuster Switch - Driver
K40 Seat Memory Control Module

Power Distribution Schematics (CB1DR and CB2DR Circuit Breakers, F26DR, F27DR, F28DR, 30DR. and F32DR Fuses)

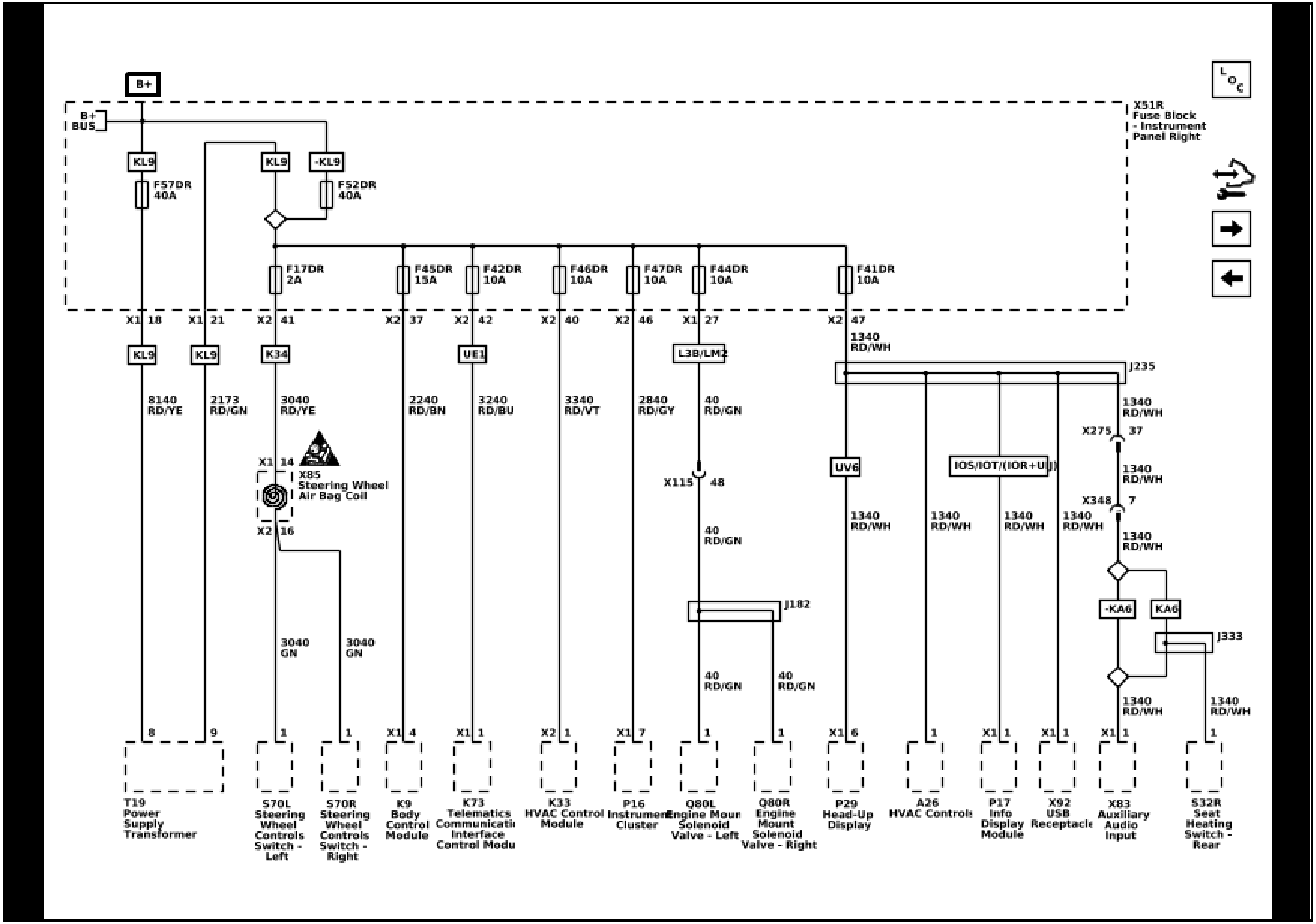

B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
F30DR 10A
F32DR 10A
F28DR 50A
F27DR 50A
CB1DR 20A
CB2DR 20A
F26DR 10A
30
87
KR76A Retained Accessory Power Relay 1
X1 5
X2 28
X1 - 4 (Not Used)
X2 27
31
X1 16
X1 - 7 (Not Used)
X1 6
X3 10
X1 8
JL1/J61
D07/AZ3
D07/AZ3
K4C
4440 RD/GN
4440 RD/GN
5140 RD/GN
640 RD/WH
4240 RD/BN
1040 RD/WH
143 VT/YE
43 VT/YE
4601 VT
43 VT/YE
JL1
-JL1
X320 22
J240
X348 15
9
X348 11
X275 70
D07
AZ3
D07
AZ3
4440 RD/GN
5140 RD/GN
5140 RD/GN
1040 RD/WH
1040 RD/WH
143 VT/YE
143 VT/YE
4601 VT
43 VT/YE
1
X1 9
1
1
16
A
A
A
1
6
X2 7
1
X260 6
K85 Passenger Presence Module
K36 Inflatabl Restrain Sensing and Diagnostic Module
S76 Trailer Brake Control Switch
B80 Park Brake Switch
X84 Data Link Connector
X80G Accessory Power Receptacle - Instrument Panel
X80L Accessory Power Receptacle - Center Console Rea
X80M Accessory Power Receptacle - Rear Seat
X92C USB Receptacle - Center Console Rear
X92B USB Receptacle - Rear Seat
A98 Front Overhead Console Assembly
T22 Mobile Device Wireless Charger Module
5502232

Power Distribution Schematics (F20DR, F21DR, F22DR, F23DR, F24DR, and F25DR Fuses)


B+
B+ BUS
30
KR73 Ignition Main Relay
87A
87
X51R Fuse Block - Instrument Panel Right
F21DR 10A
F20DR 15A
F22DR 7.5A
F23DR 10A
F25DR 15A
F24DR 10A
X2 10
X1 1
X2 15
X3 - 13 (Not Used)
X1 13
12
X2 11
X2 - 20 (Not Used)
X1 - 2 (Not Used)
X2 19
X3 14
BTM
KQV
KQV
KI3
UVC
KL9
C32
807 BU/VT
4939 VT/WH
X310 21
X320 21
J316
J331
1139 VT/WH
X1 21
X85 Steering Wheel Air Bag Coil
X2 9
1139 OG
X2 3
1739 VT/GN
X138 1
X926 24
5
539 VT/GY
1639 VT/BK
J232
(UHX/UEU)-UV6
DD8/DR2
1139 VT/WH
3
1
6
X2 2
X2 23
X1 8
X1 2
K60 Steering Column Lock Module
M73C Seat Blower Motor - Driver Cushion
M73A Seat Blower Motor - Driver Back
M73B Seat Blower Motor - Passenger Back
M73D Seat Blower Motor - Passenger Cushion
K32 Steering Wheel Heating Control Module
B87 Rearview Camera
T19 Power Supply Transformer
E40 Electrical Auxiliary Heater
K56 Serial Data Gateway Module
P16 Instrument Cluster
P43 Collision Alert Indicators
A10 Inside Rearview Mirror
A98 Front Overhead Console Assembly
L O C

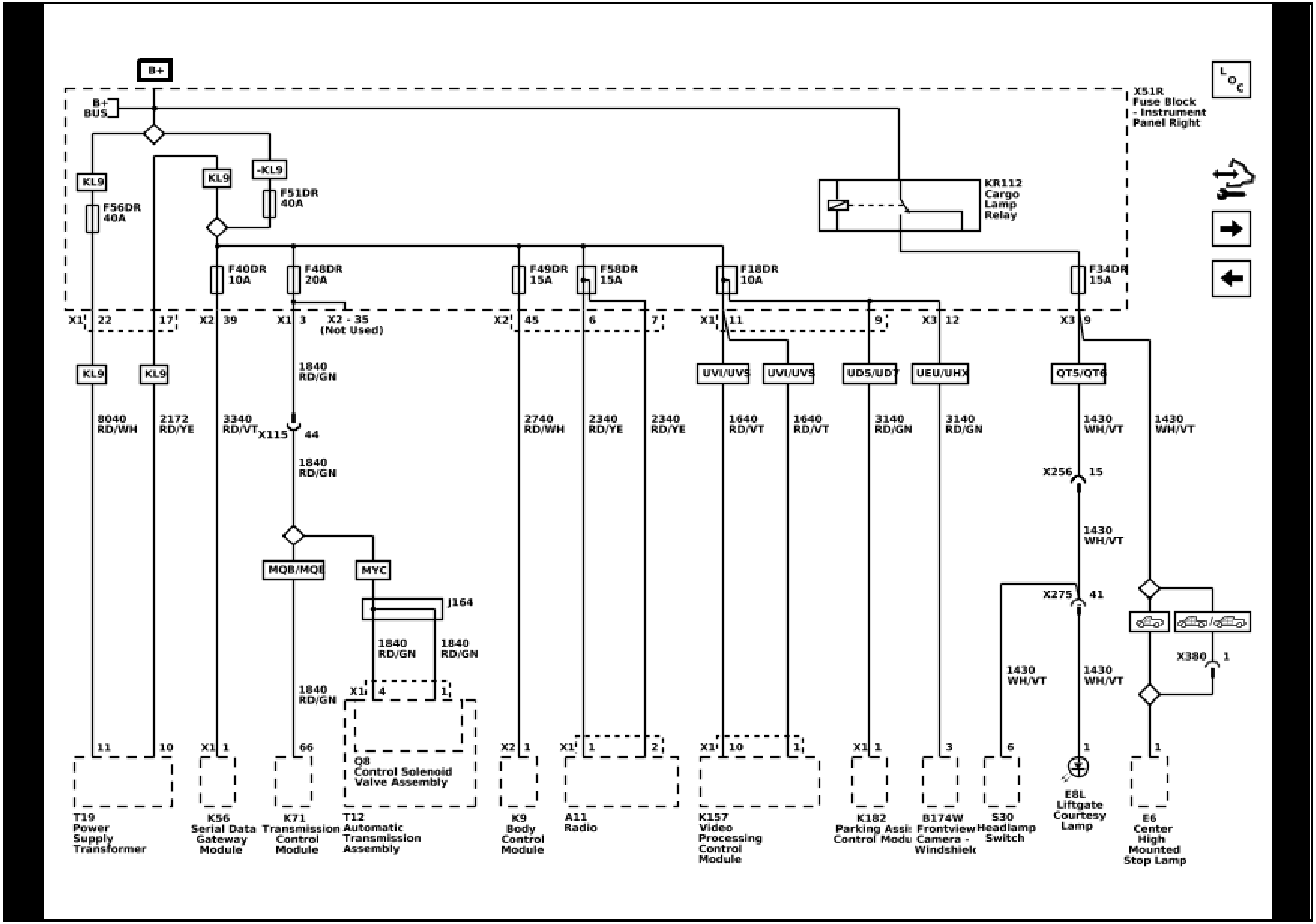
5502233

Power Distribution Schematics (F17DR, F41DR, F42DR, F44DR, F45DR, F46DR, F47DR, F52DR, and F57DR Fuses)

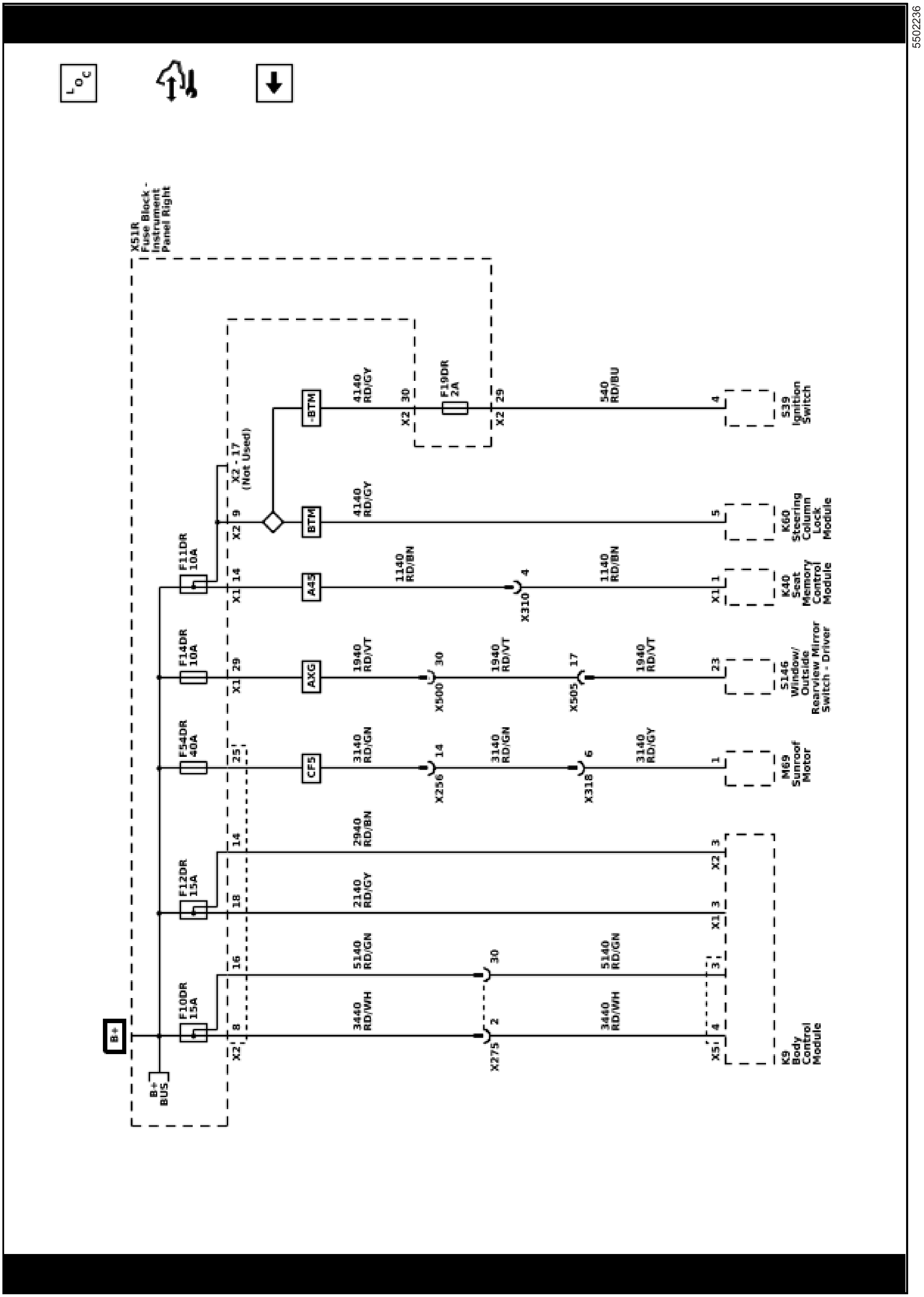

B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
KL9
-KL9
F57DR 40A
F52DR 40A
F17DR 2A
F45DR 15A
F42DR 10A
F46DR 10A
F47DR 10A
F44DR 10A
F41DR 10A
X1 18
X1 21
X2 41
X2 37
X2 42
X2 40
X2 46
X1 27
X2 47
K34
UE1
L3B/LM2
UV6
IOS/IOT/(IOR+U
J235
J182
J333
-KA6
KA6
8140 RD/YE
2173 RD/GN
3040 RD/YE
2240 RD/BN
3240 RD/BU
3340 RD/VT
2840 RD/GY
40 RD/GN
1340 RD/WH
3040 GN
X1 14
X85 Steering Wheel Air Bag Coil
X2 16
X115 48
X275 37
X348 7
T19 Power Supply Transformer
S70L Steering Wheel Controls Switch - Left
S70R Steering Wheel Controls Switch - Right
K9 Body Control Module
K73 Telematics Communicati Interface Control Modu
K33 HVAC Control Module
P16 Instrument Cluster
Q80L Engine Moun Solenoid Valve - Left
Q80R Engine Mount Solenoid Valve - Right
P29 Head-Up Display
A26 HVAC Controls
P17 Info Display Module
X92 USB Receptacle
X83 Auxiliary Audio Input
S32R Seat Heating Switch - Rear

5502234

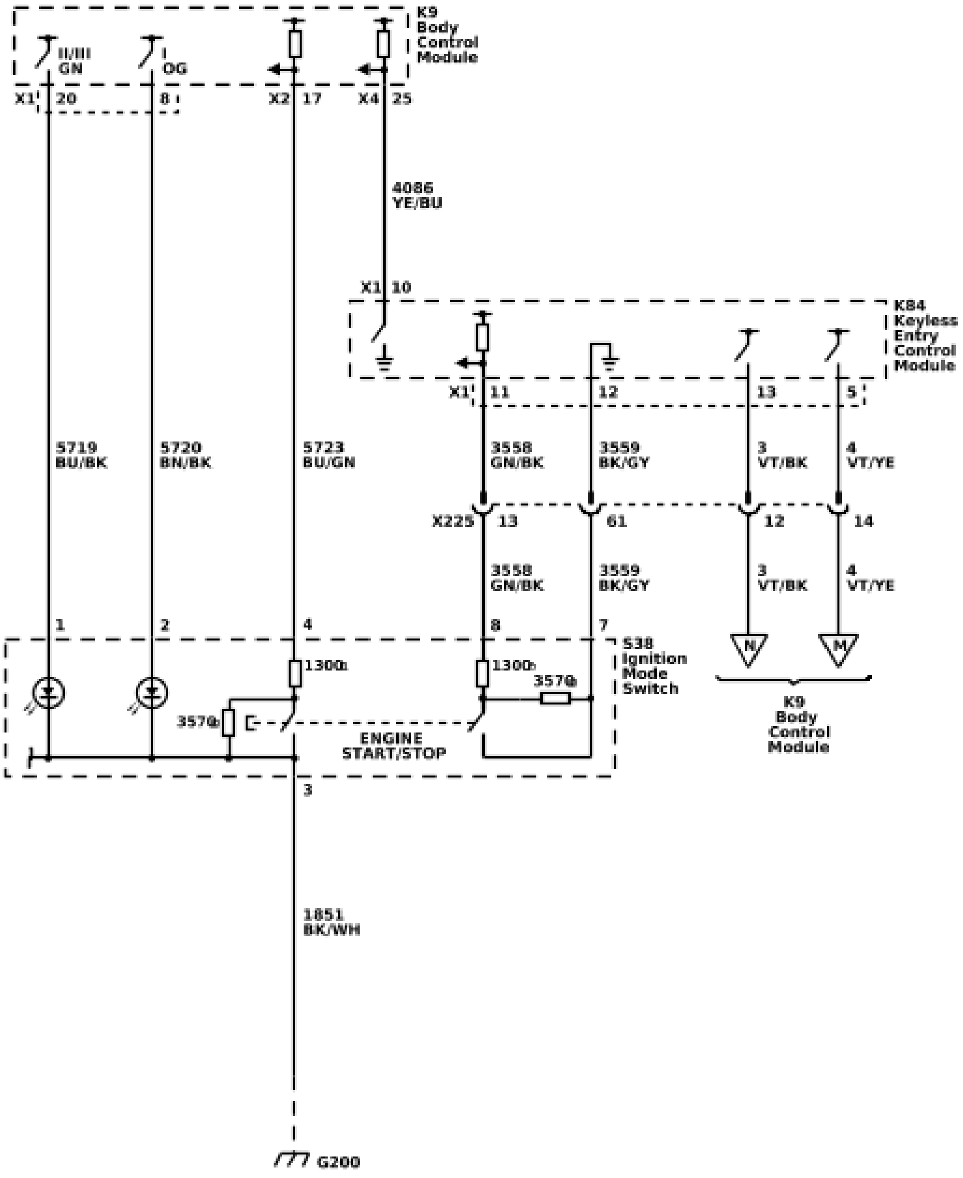
Power Distribution Schematics (F18DR, F34DR, F40DR, F48DR, F49DR, F51DR, F56DR, and F58DR Fuses)


B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
KL9
-KL9
F56DR 40A
F51DR 40A
KR112 Cargo Lamp Relay
F40DR 10A
F48DR 20A
F49DR 15A
F58DR 15A
F18DR 10A
F34DR 15A
X1 22
17
X2 39
X1 3
X2 - 35 (Not Used)
X2 45
6
7
X1 11
9
X3 12
X3 9
UVI/UVS
UD5/UD7
UEU/UHX
QT5/QT6
MQB/MQE
MYC
J164
8040 RD/WH
2172 RD/YE
3340 RD/VT
1840 RD/GN
X115 44
2740 RD/WH
2340 RD/YE
1640 RD/VT
3140 RD/GN
1430 WH/VT
X256 15
X275 41
X380 1
11
10
X1 1
66
X1 4
1
X2 1
X1 1
2
X1 10
1
X1 1
3
6
1
1
T19 Power Supply Transformer
K56 Serial Data Gateway Module
K71 Transmission Control Module
Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly
K9 Body Control Module
A11 Radio
K157 Video Processing Control Module
K182 Parking Assist Control Module
B174W Frontview Camera - Windshield
S30 Headlamp Switch
E8L Liftgate Courtesy Lamp
E6 Center High Mounted Stop Lamp
5502235

Power Distribution Schematics (F10DR, F11DR, F12DR, F14DR, F19DR, and F54DR Fuses)

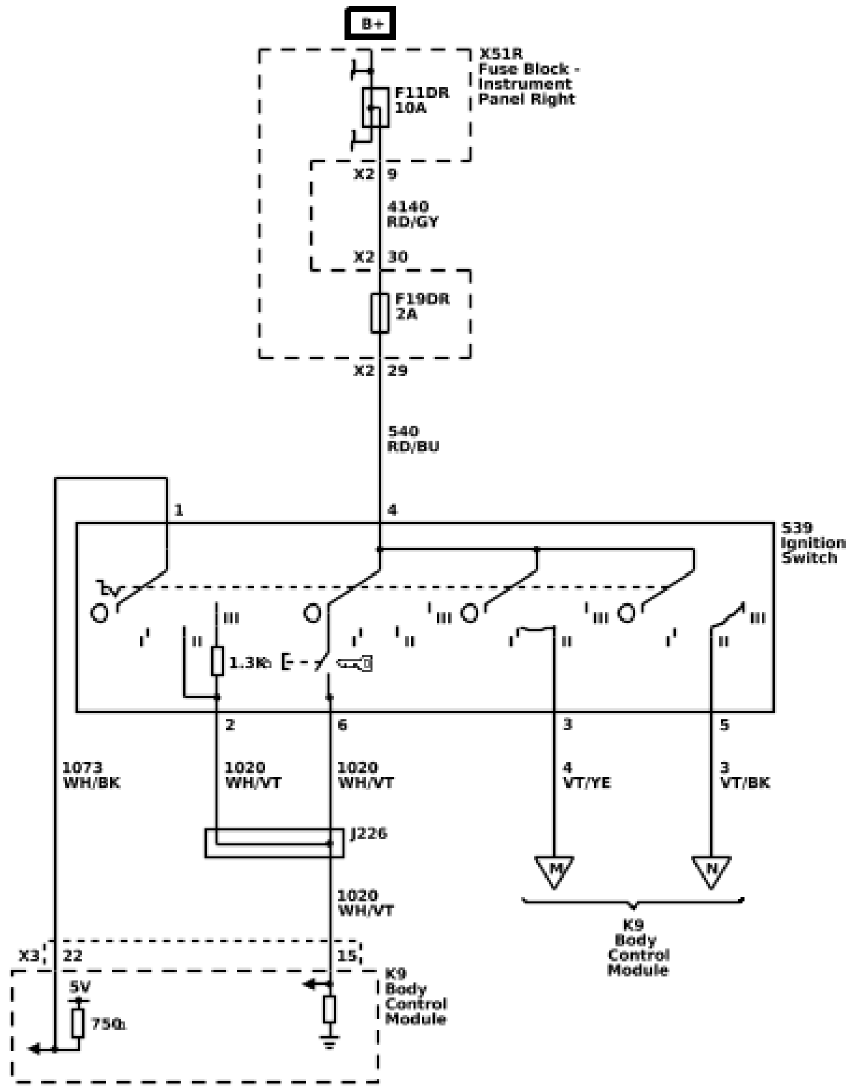

5502236
B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
F10DR 15A
F12DR 15A
F54DR 40A
F14DR 10A
F11DR 10A
F19DR 2A
X2 8
16
18
14
25
X1 29
X1 14
X2 9
X2 - 17 (Not Used)
X2 30
X2 29
CF5
AXG
A45
BTM
-BTM
3440 RD/WH
5140 RD/GN
2140 RD/GY
2940 RD/BN
3140 RD/GN
3140 RD/GY
1940 RD/VT
1140 RD/BN
4140 RD/GY
540 RD/BU
X275 2
30
X256 14
X318 6
X500 30
X505 17
X310 4
X5 4
3
X1 3
X2 3
1
23
X1 1
5
4
K9 Body Control Module
M69 Sunroof Motor
S146 Window/ Outside Rearview Mirror Switch - Driver
K40 Seat Memory Control Module
K60 Steering Column Lock Module
S39 Ignition Switch

Power Moding Schematics (Ignition Mode Switch (BTM))


K9
Body
Control
Module
II/III
GN
I
OG
X1 20
8
X2 17
X4 25
4086
YE/BU
X1 10
K84
Keyless
Entry
Control
Module
X1 11
12
13
5
5719
BU/BK
5720
BN/BK
5723
BU/GN
3558
GN/BK
3559
BK/GY
3
VT/BK
4
VT/YE
X225 13
61
12
14
3558
GN/BK
3559
BK/GY
3
VT/BK
4
VT/YE
1
2
4
8
7
S38
Ignition
Mode
Switch
1300Ω
1300Ω
3570Ω
3570Ω
ENGINE
START/STOP
N
M
K9
Body
Control
Module
3
1851
BK/WH
G200

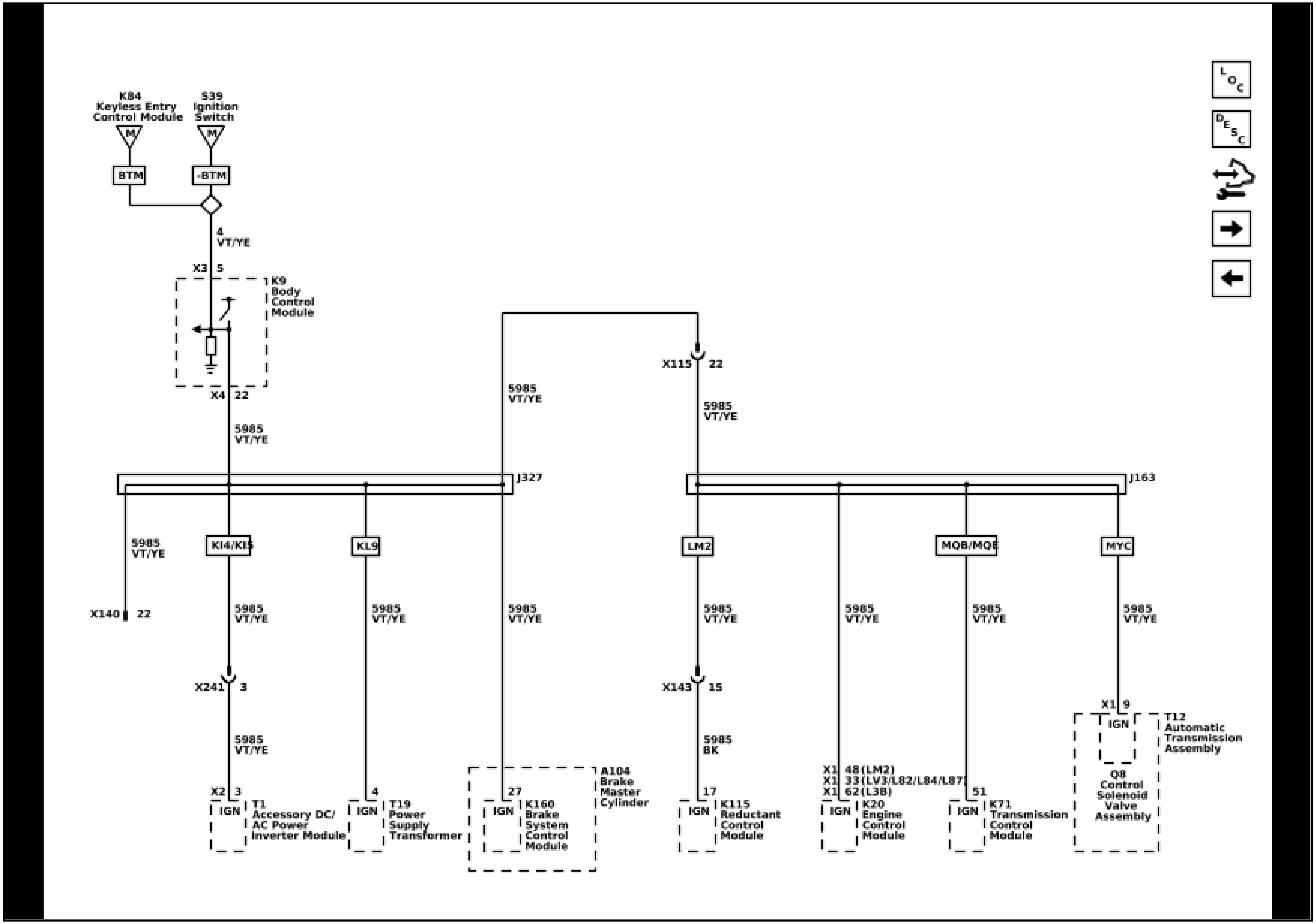
5502237

Power Moding Schematics (Ignition Switch (without BTM))


B+
X51R
Fuse Block -
Instrument
Panel Right
F11DR
10A
X2 9
4140
RD/GY
X2 30
F19DR
2A
X2 29
540
RD/BU
1
4
S39
Ignition
Switch
III
II
I
1.3k
2
6
3
5
1073
WH/BK
1020
WH/VT
1020
WH/VT
4
VT/YE
3
VT/BK
J226
M
N
K9
Body
Control
Module
1020
WH/VT
X3 22
15
5V
750
K9
Body
Control
Module

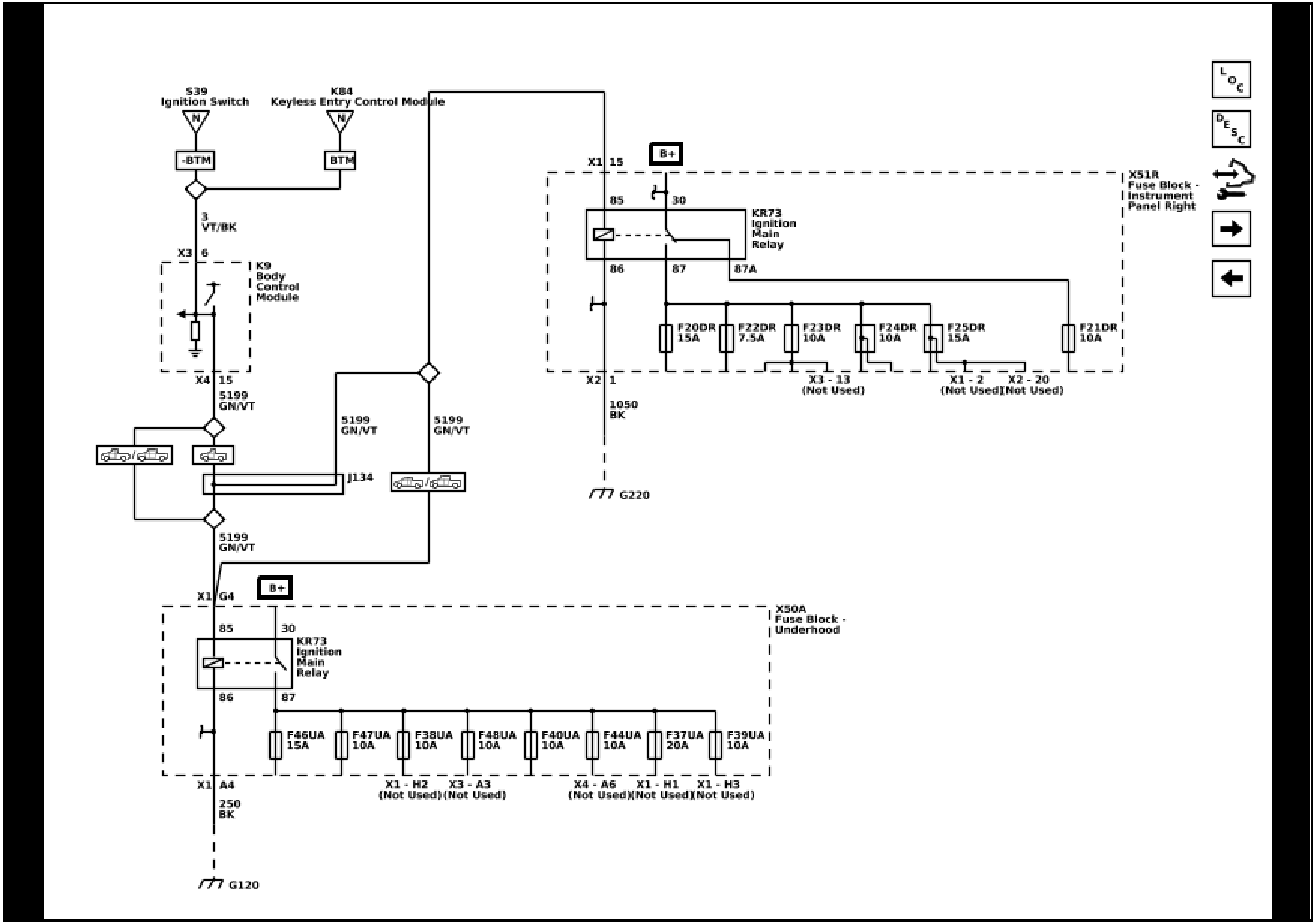
5502238

Power Moding Schematics (Accessory Wakeup)

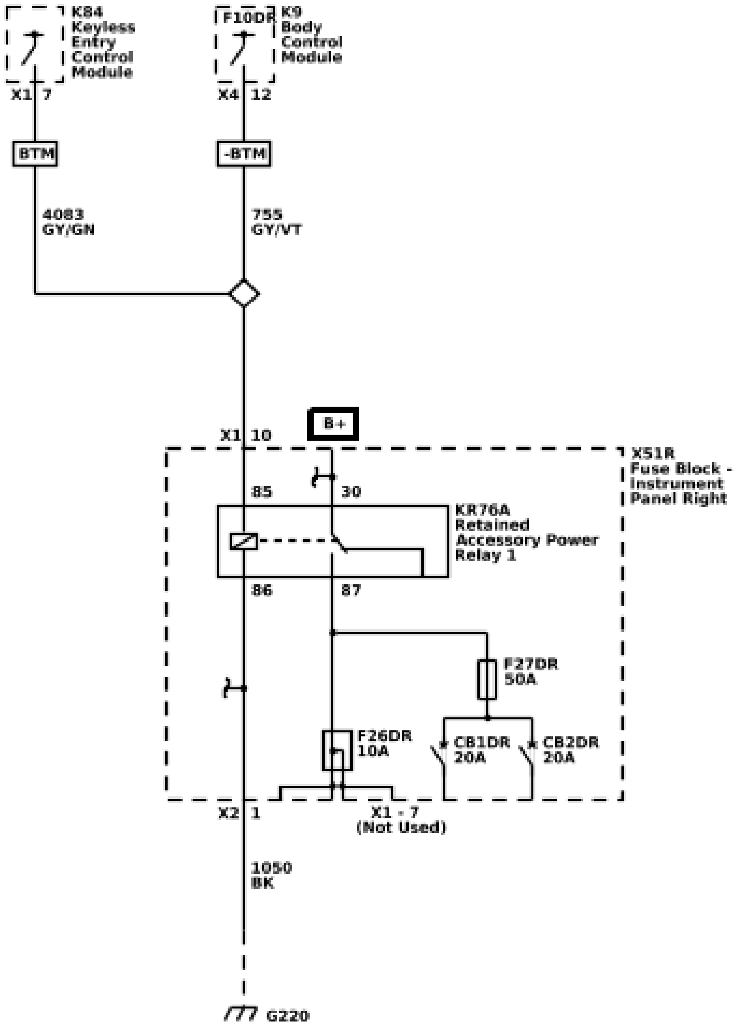

K84
Keyless Entry
Control Module
S39
Ignition
Switch
M
M
BTM
-BTM
4
VT/YE
X3 5
K9
Body
Control
Module
X4 22
5985
VT/YE
X115 22
5985
VT/YE
J327
J163
5985
VT/YE
KI4/KI5
KL9
LM2
MQB/MQE
MYC
X140 22
5985
VT/YE
X241 3
X143 15
5985
BK
X1 9
IGN
T12
Automatic
Transmission
Assembly
Q8
Control
Solenoid
Valve
Assembly
X2 3
IGN
T1
Accessory DC/
AC Power
Inverter Module
4
IGN
T19
Power
Supply
Transformer
A104
Brake
Master
Cylinder
27
IGN
K160
Brake
System
Control
Module
17
IGN
K115
Reductant
Control
Module
X1 48(LM2)
X1 33(LV3/L82/L84/L87)
X1 62(L3B)
IGN
K20
Engine
Control
Module
51
IGN
K71
Transmission
Control
Module

5502239

Power Moding Schematics (Ignition Main Relays)

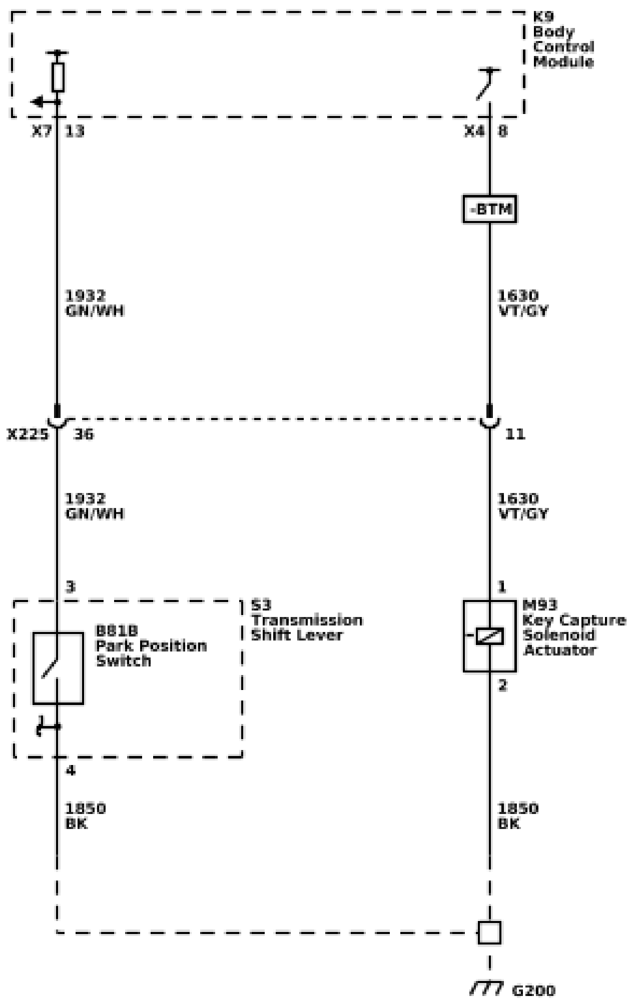

S39
Ignition Switch
N
-BTM
K84
Keyless Entry Control Module
N
BTM
3
VT/BK
X3 6
K9
Body
Control
Module
X4 15
5199
GN/VT
5199
GN/VT
5199
GN/VT
J134
5199
GN/VT
X1 G4
B+
85
30
KR73
Ignition
Main
Relay
86
87
X50A
Fuse Block -
Underhood
F46UA
15A
F47UA
10A
F38UA
10A
F48UA
10A
F40UA
10A
F44UA
10A
F37UA
20A
F39UA
10A
X1 A4
X1 - H2
(Not Used)
X3 - A3
(Not Used)
X4 - A6
(Not Used)
X1 - H1
(Not Used)
X1 - H3
(Not Used)
250
BK
G120
X1 15
B+
85
30
KR73
Ignition
Main
Relay
86
87
87A
X51R
Fuse Block -
Instrument
Panel Right
F20DR
15A
F22DR
7.5A
F23DR
10A
F24DR
10A
F25DR
15A
F21DR
10A
X2 1
X3 - 13
(Not Used)
X1 - 2
(Not Used)
X2 - 20
(Not Used)
1050
BK
G220
5502240

Power Moding Schematics (Retained Accessory Power Relays)


K84
Keyless
Entry
Control
Module
X1 7
F10DR
K9
Body
Control
Module
X4 12
BTM
-BTM
4083
GY/GN
755
GY/VT
B+
X1 10
X51R
Fuse Block -
Instrument
Panel Right
85
30
KR76A
Retained
Accessory Power
Relay 1
86
87
F27DR
50A
F26DR
10A
CB1DR
20A
CB2DR
20A
X2 1
X1 - 7
(Not Used)
1050
BK
G220

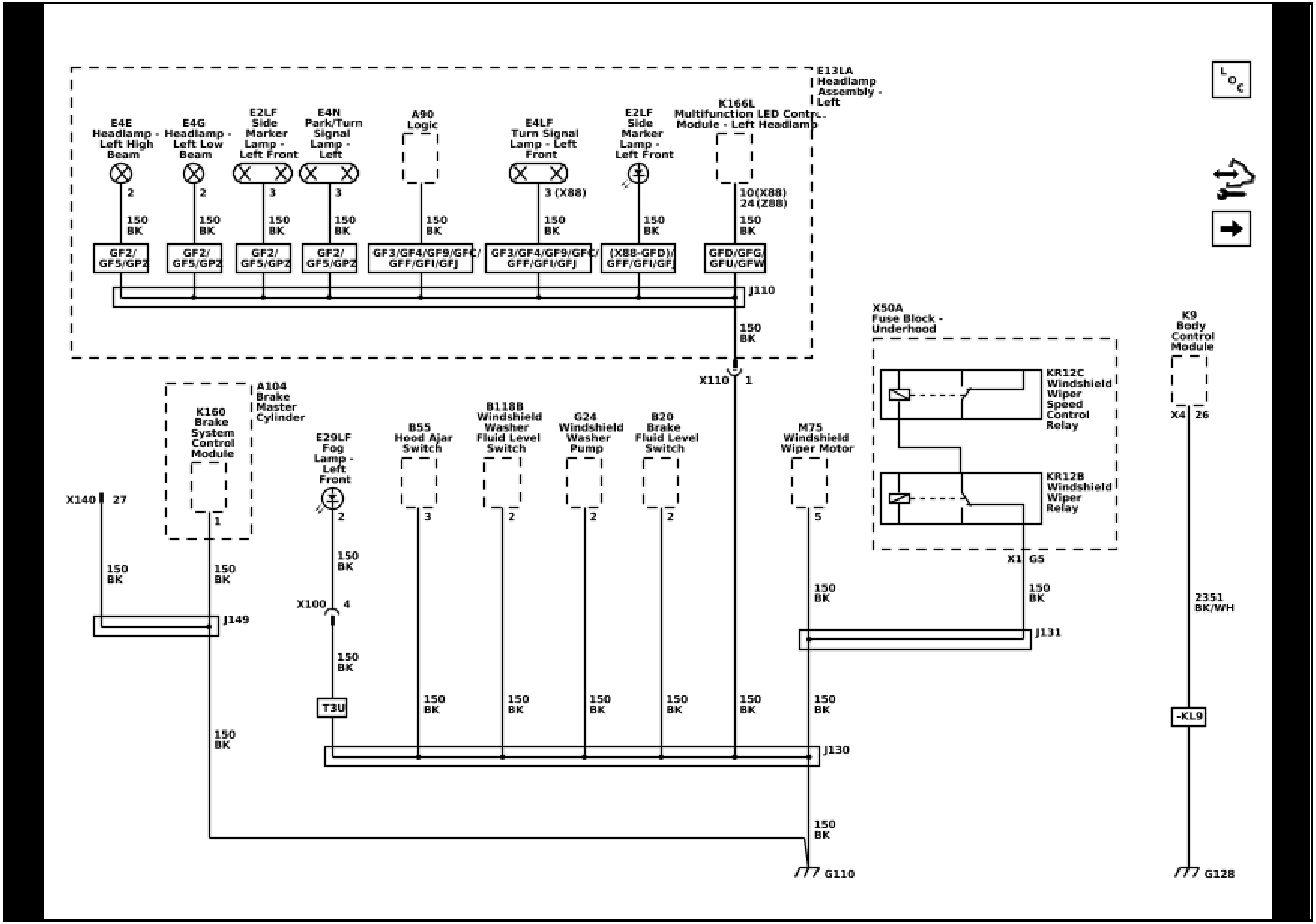
5502241

Ignition Lock Schematics (Ignition Lock)

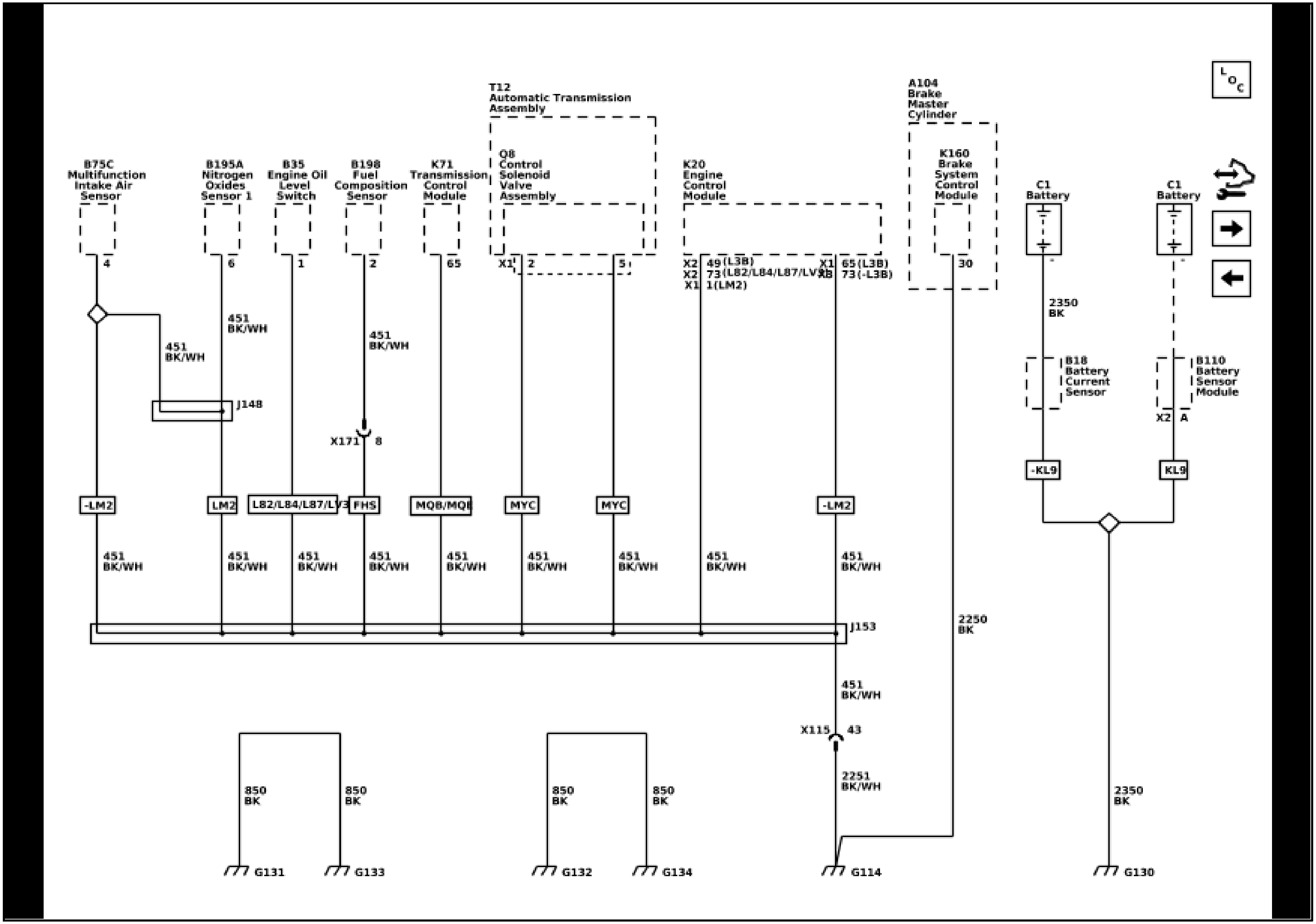

K9
Body
Control
Module
X7 13
X4 8
-BTM
1932
GN/WH
1630
VT/GY
X225 36
11
1932
GN/WH
1630
VT/GY
3
1
S3
Transmission
Shift Lever
B81B
Park Position
Switch
M93
Key Capture
Solenoid
Actuator
2
4
1850
BK
1850
BK
G200

5502242

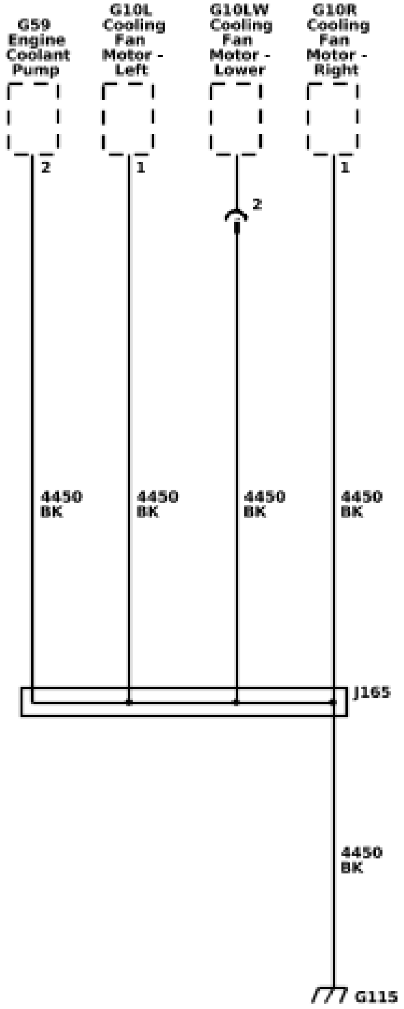
Ground Distribution Schematics (G110 and G128)


E13LA Headlamp Assembly - Left
E4E Headlamp - Left High Beam
E4G Headlamp - Left Low Beam
E2LF Side Marker Lamp - Left Front
E4N Park/Turn Signal Lamp - Left
A90 Logic
E4LF Turn Signal Lamp - Left Front
E2LF Side Marker Lamp - Left Front
K166L Multifunction LED Control Module - Left Headlamp
2
3
3 (X88)
10(X88)
24(Z88)
150 BK
GF2/ GF5/GP2
GF3/GF4/GF9/GFC/ GFF/GFI/GFJ
(X88-GFD)/ GFF/GFI/GFJ
GFD/GFG/ GFU/GFW
J110
X110
1
X50A Fuse Block - Underhood
KR12C Windshield Wiper Speed Control Relay
KR12B Windshield Wiper Relay
X1 G5
K9 Body Control Module
X4 26
2351 BK/WH
-KL9
G128
A104 Brake Master Cylinder
K160 Brake System Control Module
X140 27
J149
E29LF Fog Lamp - Left Front
X100 4
T3U
B55 Hood Ajar Switch
B118B Windshield Washer Fluid Level Switch
G24 Windshield Washer Pump
B20 Brake Fluid Level Switch
M75 Windshield Wiper Motor
5
J131
J130
G110
5502243

Ground Distribution Schematics (G114, G130, G131, G132, G133, and G134)

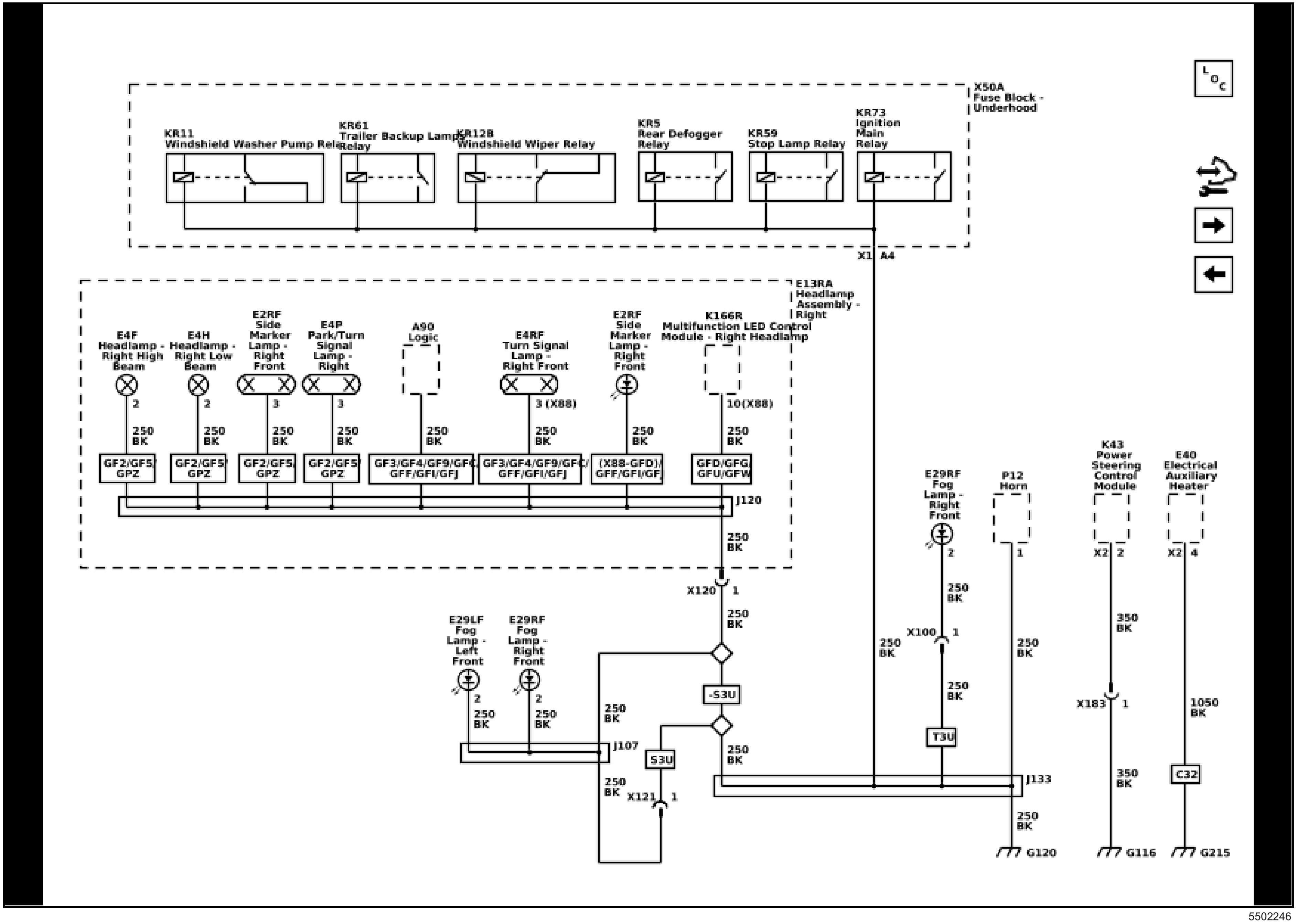

B75C Multifunction Intake Air Sensor
B195A Nitrogen Oxides Sensor 1
B35 Engine Oil Level Switch
B198 Fuel Composition Sensor
K71 Transmission Control Module
T12 Automatic Transmission Assembly
Q8 Control Solenoid Valve Assembly
K20 Engine Control Module
A104 Brake Master Cylinder
K160 Brake System Control Module
C1 Battery
C1 Battery
B18 Battery Current Sensor
B110 Battery Sensor Module
4
6
1
2
65
X1 2
5
X2 49 (L3B)
X2 73 (L82/L84/L87/LV3)
X1 1(LM2)
X1 65 (L3B)
X3 73 (-L3B)
30
X2 A
451 BK/WH
J148
X171 8
-LM2
LM2
L82/L84/L87/LV3
FHS
MQB/MQE
MYC
MYC
-LM2
-KL9
KL9
2350 BK
2250 BK
J153
X115 43
2251 BK/WH
850 BK
G131
G133
G132
G134
G114
G130
5502244

Ground Distribution Schematics (G115 and G118 (L3B/LM2))

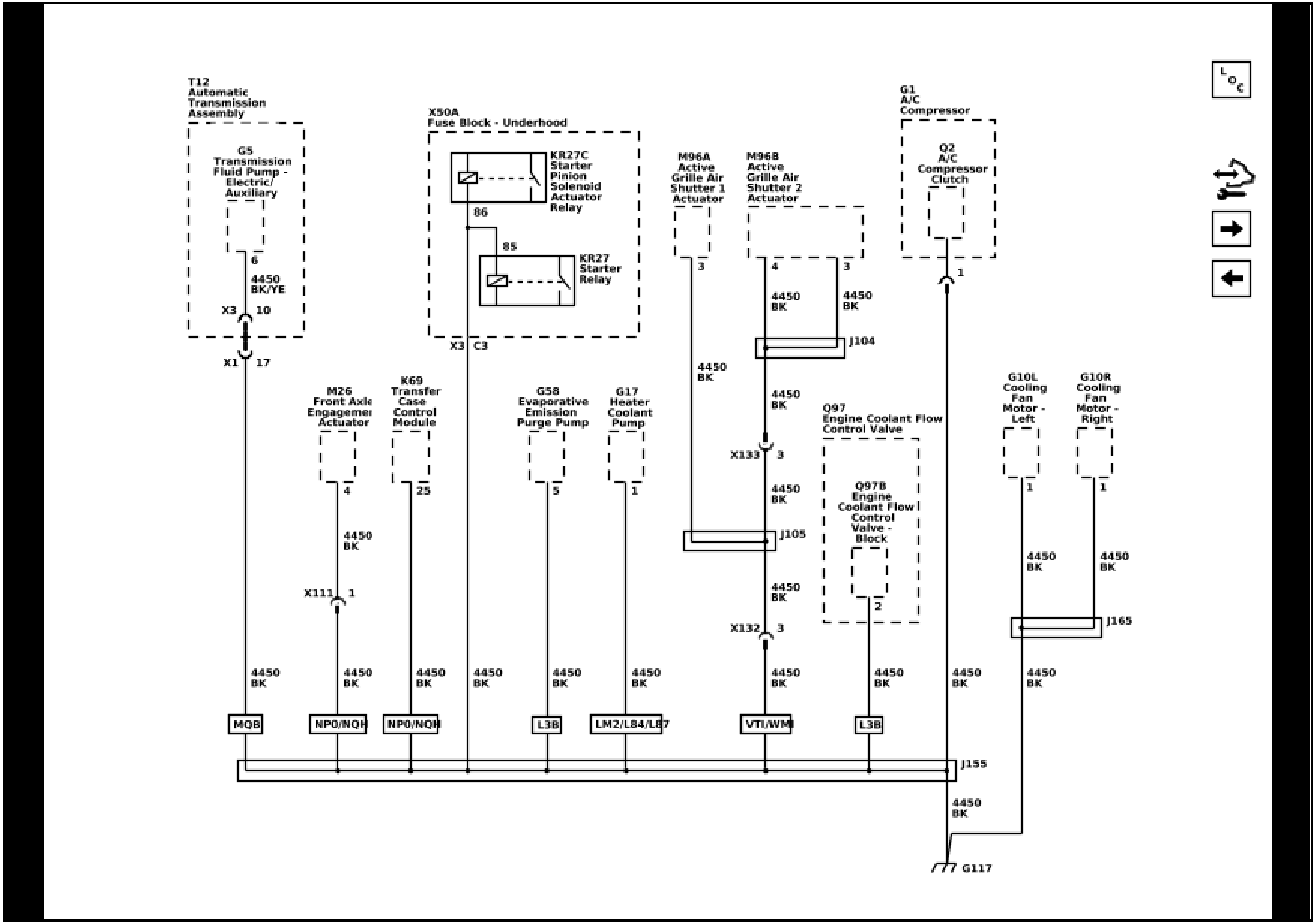

G59
Engine
Coolant
Pump
G10L
Cooling
Fan
Motor -
Left
G10LW
Cooling
Fan
Motor -
Lower
G10R
Cooling
Fan
Motor -
Right
2
1
2
1
4450
BK
4450
BK
4450
BK
4450
BK
J165
4450
BK
G115

5502245

Ground Distribution Schematics (G116, G120, and G215)


X50A
Fuse Block - Underhood
KR11
Windshield Washer Pump Relay
KR61
Trailer Backup Lamps Relay
KR12B
Windshield Wiper Relay
KR5
Rear Defogger Relay
KR59
Stop Lamp Relay
KR73
Ignition Main Relay
X1 A4
E13RA
Headlamp Assembly - Right
E4F
Headlamp - Right High Beam
E4H
Headlamp - Right Low Beam
E2RF
Side Marker Lamp - Right Front
E4P
Park/Turn Signal Lamp - Right
A90
Logic
E4RF
Turn Signal Lamp - Right Front
E2RF
Side Marker Lamp - Right Front
K166R
Multifunction LED Control Module - Right Headlamp
2
3
3 (X88)
10(X88)
250 BK
GF2/GF5/GPZ
GF3/GF4/GF9/GFC/GFF/GFI/GFJ
(X88-GFD)/GFF/GFI/GFJ
GFD/GFG/GFU/GFW
J120
X120 1
E29LF
Fog Lamp - Left Front
E29RF
Fog Lamp - Right Front
J107
-S3U
S3U
X121 1
E29RF
Fog Lamp - Right Front
X100 1
T3U
J133
P12
Horn
1
G120
K43
Power Steering Control Module
X2 2
350 BK
X183 1
G116
E40
Electrical Auxiliary Heater
X2 4
1050 BK
C32
G215
5502246

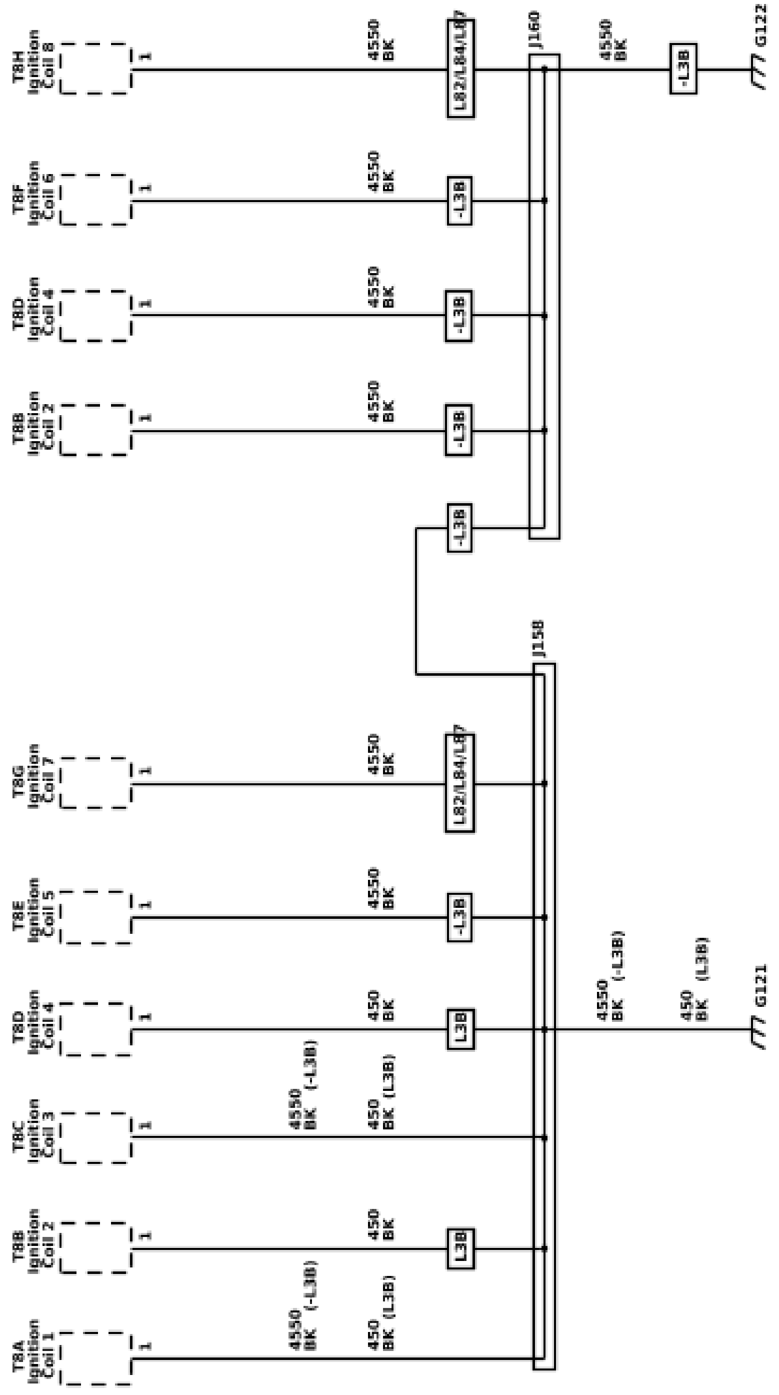
Ground Distribution Schematics (G117)


T12 Automatic Transmission Assembly
G5 Transmission Fluid Pump - Electric/ Auxiliary
6
4450 BK/YE
X3 10
X1 17
X50A Fuse Block - Underhood
KR27C Starter Pinion Solenoid Actuator Relay
86
85
KR27 Starter Relay
X3 C3
M96A Active Grille Air Shutter 1 Actuator
3
M96B Active Grille Air Shutter 2 Actuator
4
3
G1 A/C Compressor
Q2 A/C Compressor Clutch
1
J104
J105
X133 3
X132 3
M26 Front Axle Engagement Actuator
4
X111 1
K69 Transfer Case Control Module
25
G58 Evaporative Emission Purge Pump
5
G17 Heater Coolant Pump
1
Q97 Engine Coolant Flow Control Valve
Q97B Engine Coolant Flow Control Valve - Block
2
G10L Cooling Fan Motor - Left
1
G10R Cooling Fan Motor - Right
1
J165
4450 BK
MQB
NP0/NQH
NP0/NQH
L3B
LM2/L84/L87
VTI/WMI
L3B
J155
G117

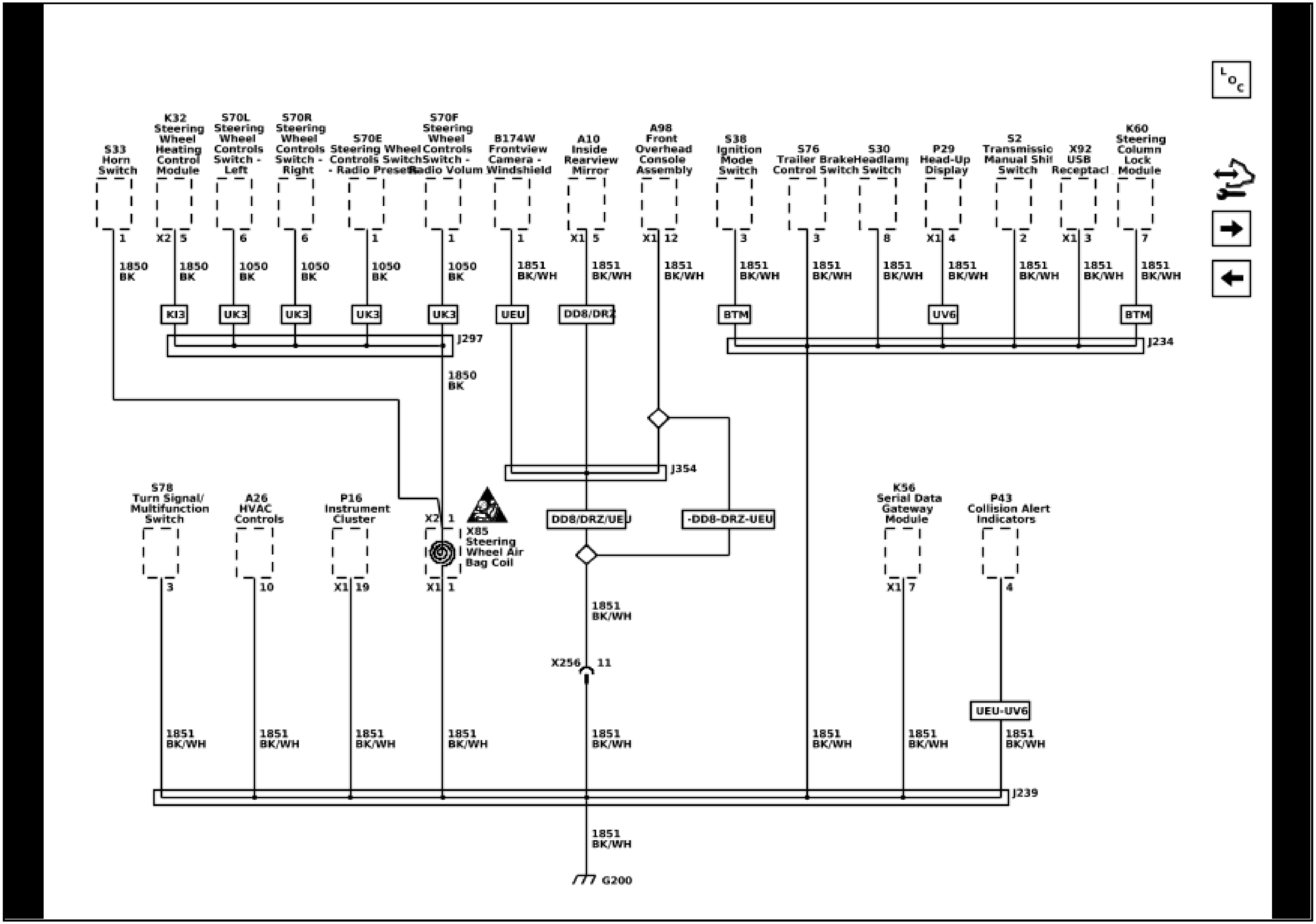
5502247

Ground Distribution Schematics (G121 and G122 (-LM2))

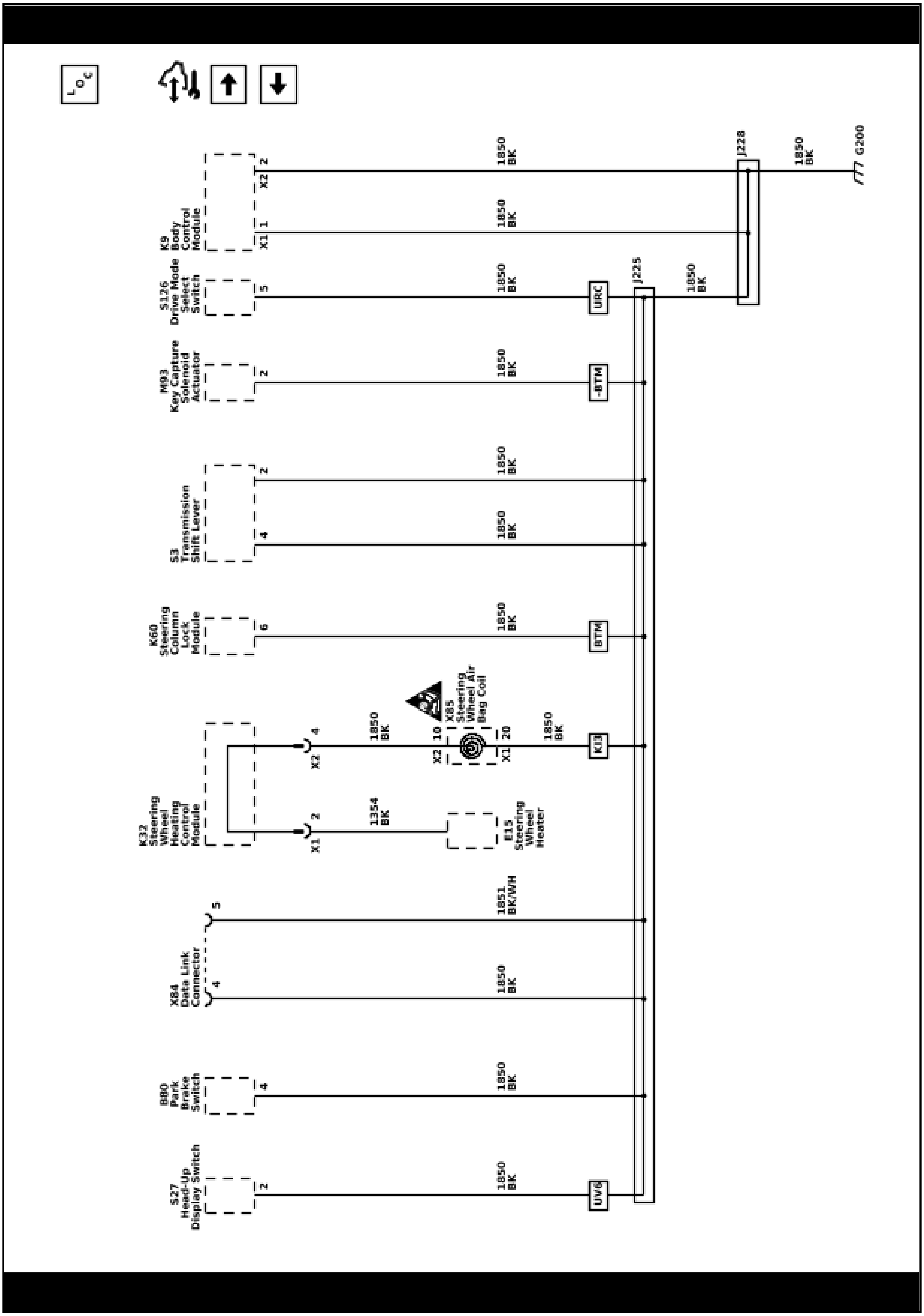
5502248


T8H Ignition Coil 8
T8F Ignition Coil 6
T8D Ignition Coil 4
T8B Ignition Coil 2
T8G Ignition Coil 7
T8E Ignition Coil 5
T8D Ignition Coil 4
T8C Ignition Coil 3
T8B Ignition Coil 2
T8A Ignition Coil 1
1
4550 BK
450 BK
4550 BK (-L3B)
450 BK (L3B)
L82/L84/L87
-L3B
L3B
J160
J158
G122
G121

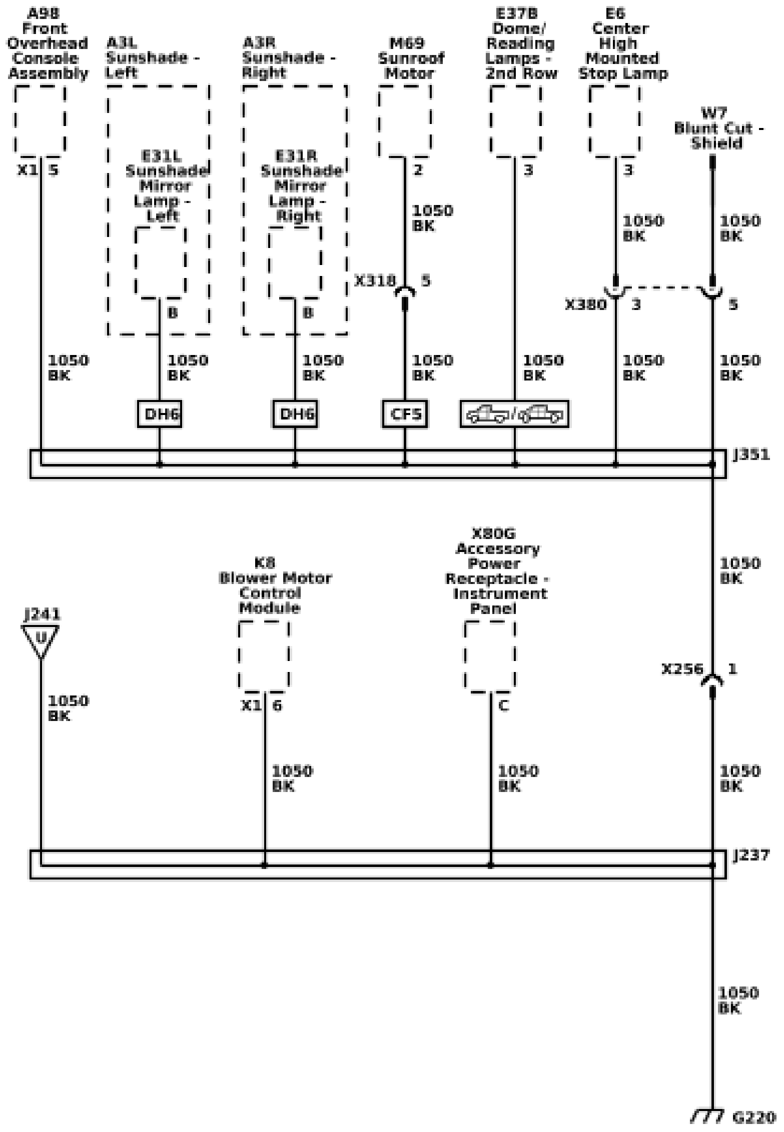
Ground Distribution Schematics (G200 (1 of 2))


S33 Horn Switch
1
1850 BK
K32 Steering Wheel Heating Control Module
X2 5
1850 BK
KI3
S70L Steering Wheel Controls Switch - Left
6
1050 BK
UK3
S70R Steering Wheel Controls Switch - Right
6
1050 BK
UK3
S70E Steering Wheel Controls Switch - Radio Presets
1
1050 BK
UK3
S70F Steering Wheel Controls Switch - Radio Volum
1
1050 BK
UK3
J297
1850 BK
B174W Frontview Camera - Windshield
1
1851 BK/WH
UEU
A10 Inside Rearview Mirror
X1 5
1851 BK/WH
DD8/DRZ
A98 Front Overhead Console Assembly
X1 12
1851 BK/WH
J354
DD8/DRZ/UEU
-DD8-DRZ-UEU
S38 Ignition Mode Switch
3
1851 BK/WH
BTM
S76 Trailer Brake Control Switch
3
1851 BK/WH
S30 Headlamp Switch
8
1851 BK/WH
P29 Head-Up Display
X1 4
1851 BK/WH
UV6
S2 Transmissio Manual Shif Switch
2
1851 BK/WH
X92 USB Receptacl
X1 3
1851 BK/WH
K60 Steering Column Lock Module
7
1851 BK/WH
BTM
J234
S78 Turn Signal/ Multifunction Switch
3
1851 BK/WH
A26 HVAC Controls
10
1851 BK/WH
P16 Instrument Cluster
X1 19
1851 BK/WH
X2 1
X85 Steering Wheel Air Bag Coil
X1 1
1851 BK/WH
1851 BK/WH
X256 11
1851 BK/WH
K56 Serial Data Gateway Module
X1 7
1851 BK/WH
P43 Collision Alert Indicators
4
UEU-UV6
1851 BK/WH
1851 BK/WH
J239
1851 BK/WH
G200
5502249

Ground Distribution Schematics (G200 (2 of 2))

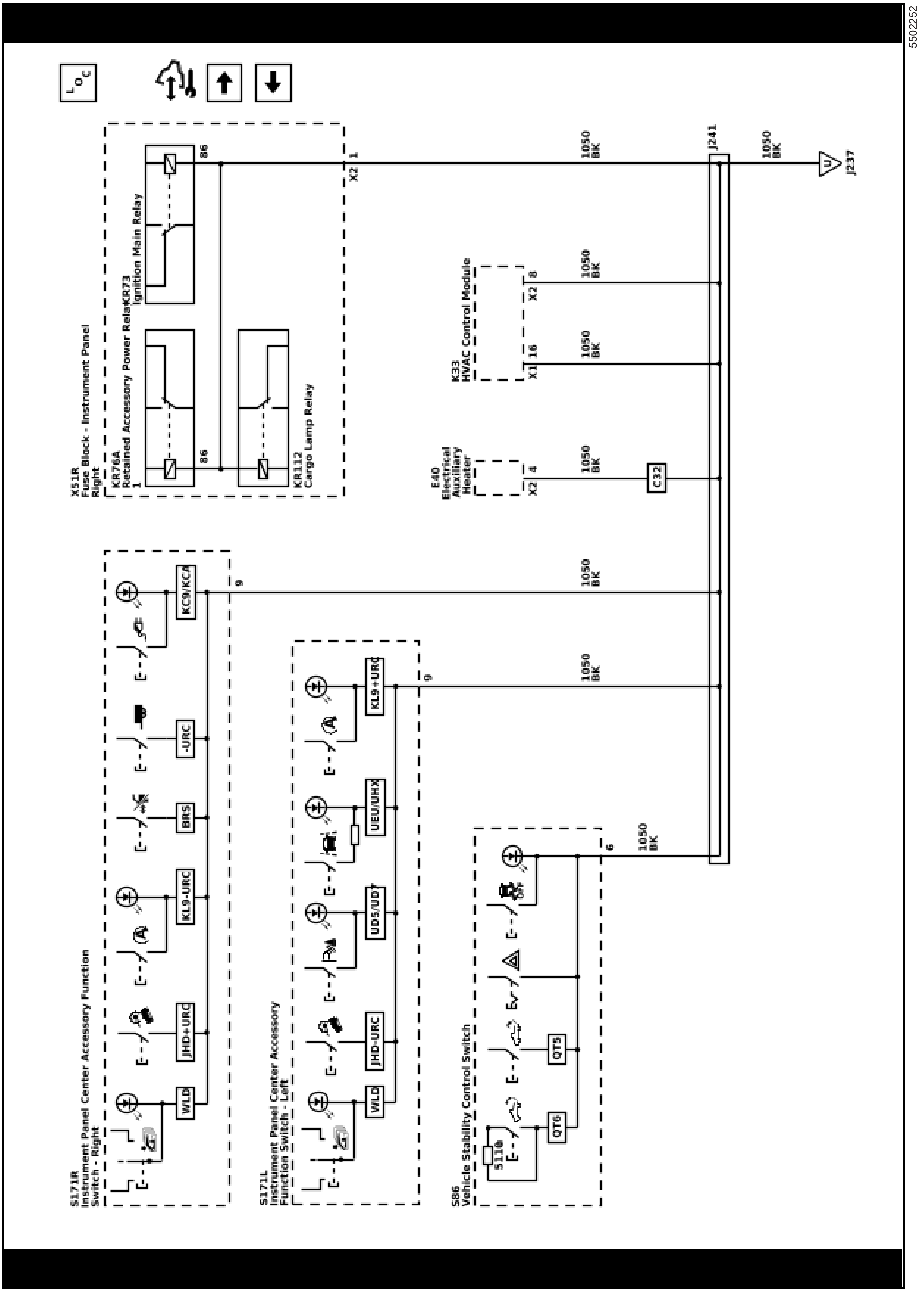

5502250
S27 Head-Up Display Switch
B80 Park Brake Switch
X84 Data Link Connector
K32 Steering Wheel Heating Control Module
E15 Steering Wheel Heater
X85 Steering Wheel Air Bag Coil
K60 Steering Column Lock Module
S3 Transmission Shift Lever
M93 Key Capture Solenoid Actuator
S126 Drive Mode Select Switch
K9 Body Control Module
1850 BK
1851 BK/WH
1354 BK
X1
X2
UV6
KI3
BTM
-BTM
URC
J225
J228
G200

Ground Distribution Schematics (G220 (1 of 2))

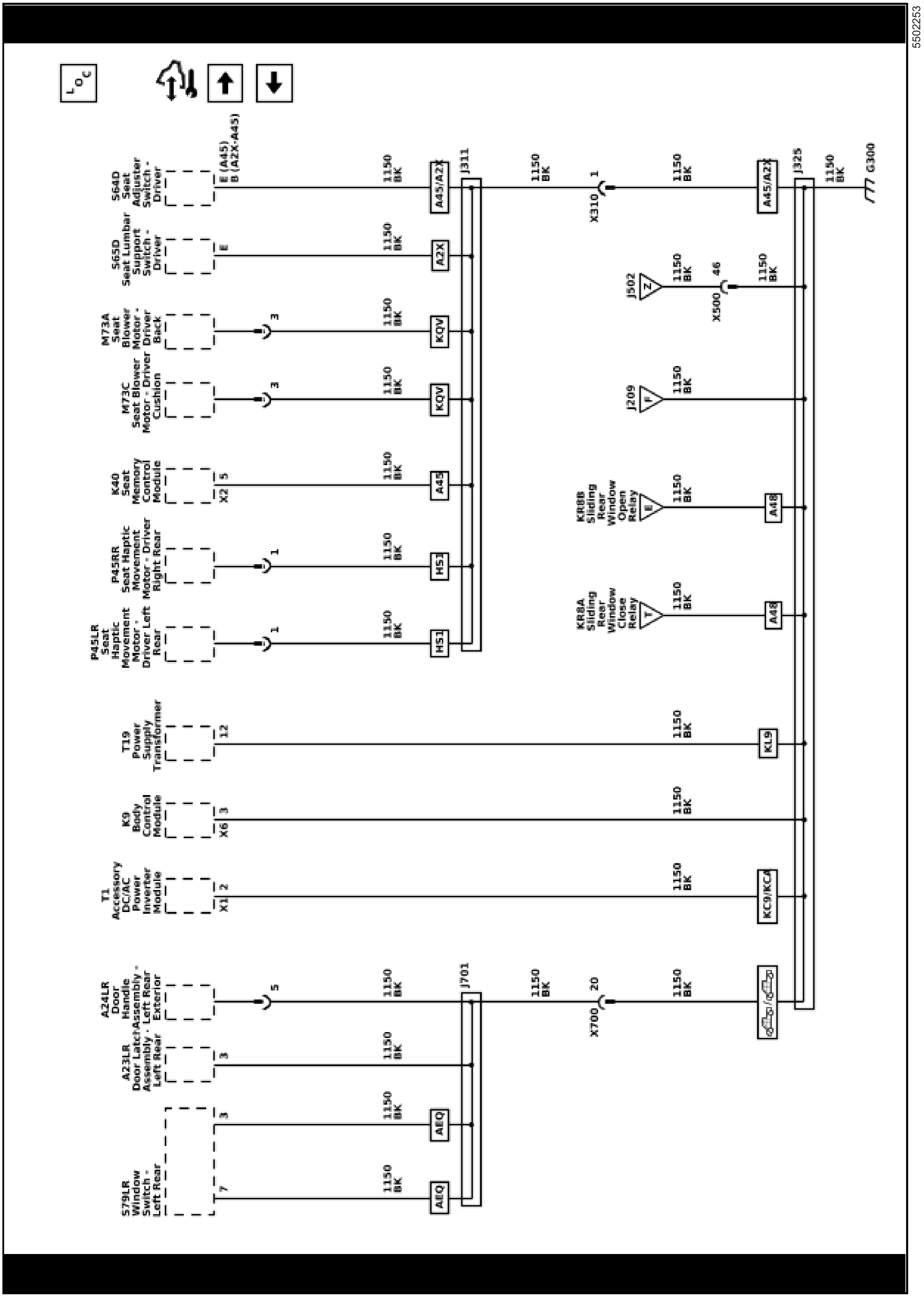

A98 Front Overhead Console Assembly
X1 5
A3L Sunshade - Left
E31L Sunshade Mirror Lamp - Left
B
A3R Sunshade - Right
E31R Sunshade Mirror Lamp - Right
B
M69 Sunroof Motor
2
X318 5
E37B Dome/ Reading Lamps - 2nd Row
3
E6 Center High Mounted Stop Lamp
3
X380 3
W7 Blunt Cut - Shield
5
1050 BK
DH6
DH6
CF5
J351
X256 1
J241
U
K8 Blower Motor Control Module
X1 6
X80G Accessory Power Receptacle - Instrument Panel
C
J237
G220

5502251

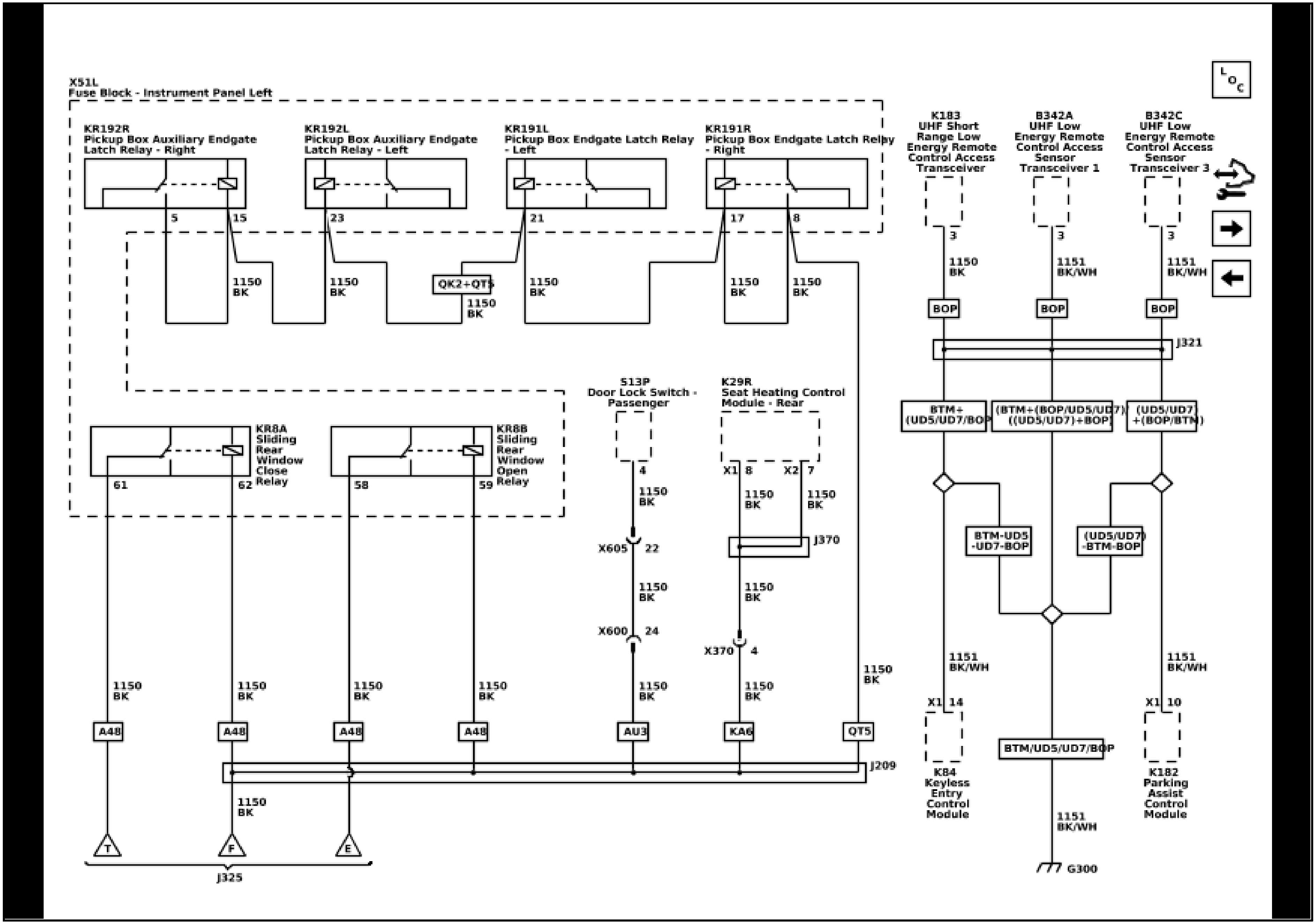
Ground Distribution Schematics (G220 (2 of 2))


5502252
X51R Fuse Block - Instrument Panel Right
KR76A Retained Accessory Power Relay
KR73 Ignition Main Relay
KR112 Cargo Lamp Relay
86
86
1
X2 1
1050 BK
J241
J237
K33 HVAC Control Module
X1 16
X2 8
E40 Electrical Auxiliary Heater
X2 4
C32
S171R Instrument Panel Center Accessory Function Switch - Right
WLD
JHD+URC
KL9-URC
BRS
-URC
KC9/KCA
9
S171L Instrument Panel Center Accessory Function Switch - Left
WLD
JHD-URC
UD5/UD7
UEU/UHX
KL9+URC
9
S86 Vehicle Stability Control Switch
511Ω
QT6
QT5
6

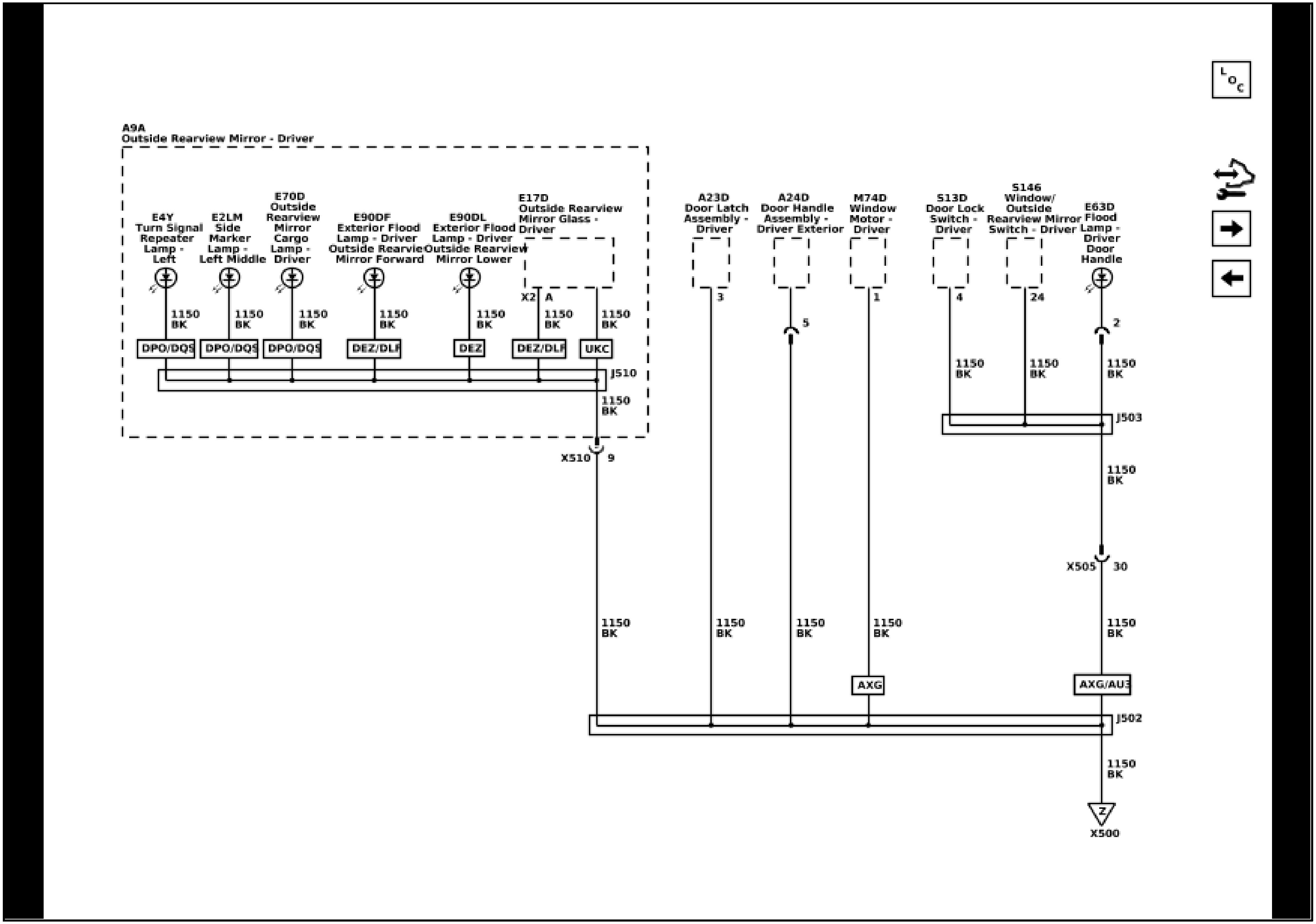
Ground Distribution Schematics (G300 (1 of 3))


5502253
S64D Seat Adjuster Switch - Driver
E (A45)
B (A2X·A45)
S65D Seat Lumbar Support Switch - Driver
E
M73A Seat Blower Motor - Driver Back
3
M73C Seat Blower Motor - Driver Cushion
3
K40 Seat Memory Control Module
X2 5
P45RR Seat Haptic Movement Motor - Driver Right Rear
1
P45LR Seat Haptic Movement Motor - Driver Left Rear
1
T19 Power Supply Transformer
12
K9 Body Control Module
X6 3
T1 Accessory DC/AC Power Inverter Module
X1 2
A24LR Door Handle Assembly - Left Rear Exterior
5
A23LR Door Latch Assembly - Left Rear
3
S79LR Window Switch - Left Rear
3
7
1150 BK
A45/A2X
A2X
KQV
A45
HS1
AEQ
J311
J701
X310
1
X700
20
J502
Z
X500
46
J209
F
KR8B Sliding Rear Window Open Relay
E
KR8A Sliding Rear Window Close Relay
T
A48
KL9
KC9/KCA
J325
G300

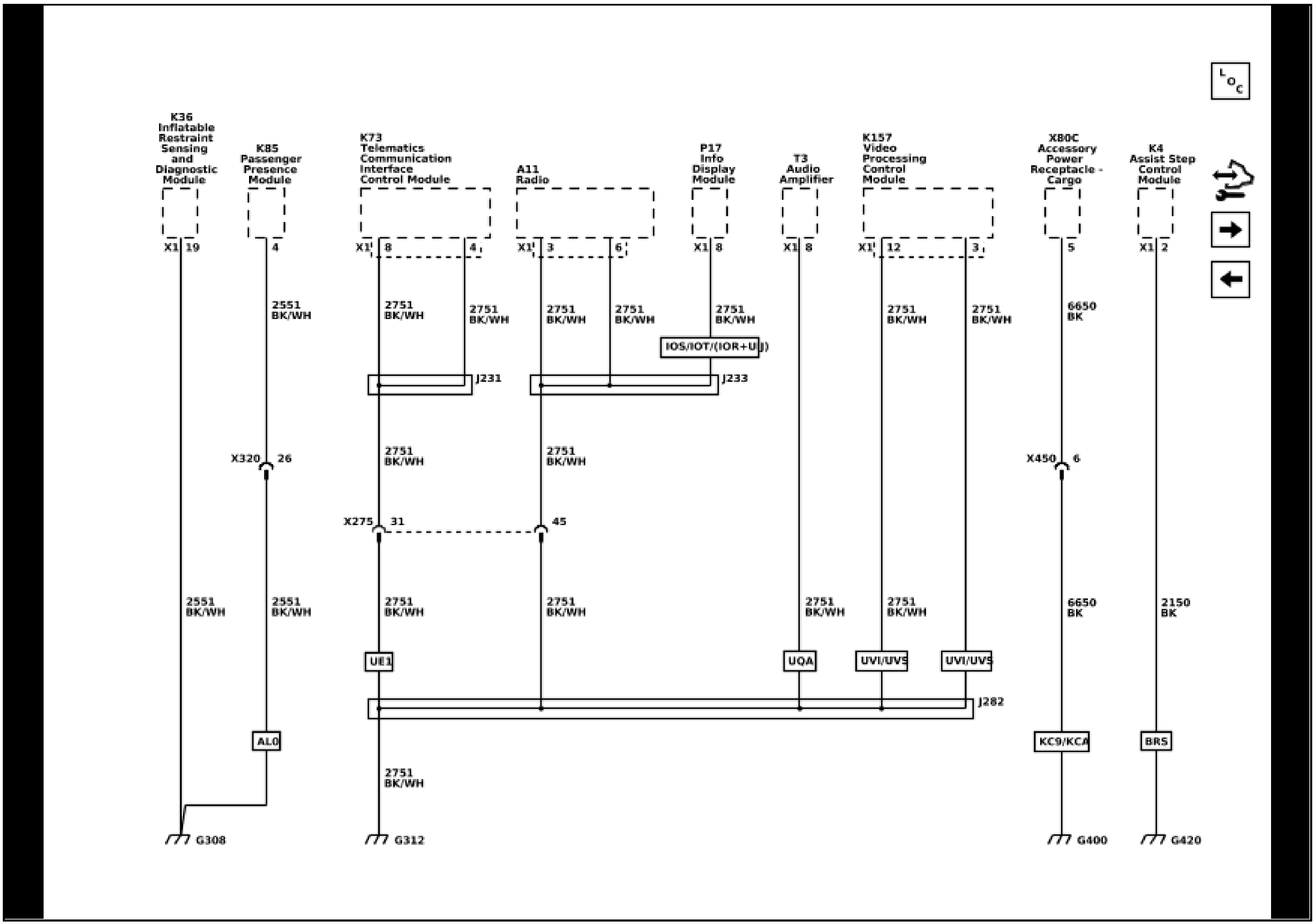
Ground Distribution Schematics (G300 (2 of 3))


X51L
Fuse Block - Instrument Panel Left
KR192R
Pickup Box Auxiliary Endgate Latch Relay - Right
KR192L
Pickup Box Auxiliary Endgate Latch Relay - Left
KR191L
Pickup Box Endgate Latch Relay - Left
KR191R
Pickup Box Endgate Latch Relay - Right
5
15
23
21
17
8
1150 BK
QK2+QT5
KR8A Sliding Rear Window Close Relay
KR8B Sliding Rear Window Open Relay
61
62
58
59
S13P
Door Lock Switch - Passenger
K29R
Seat Heating Control Module - Rear
4
X1 8
X2 7
X605 22
X600 24
J370
X370 4
A48
AU3
KA6
QT5
J209
T
F
E
J325
K183
UHF Short Range Low Energy Remote Control Access Transceiver
B342A
UHF Low Energy Remote Control Access Sensor Transceiver 1
B342C
UHF Low Energy Remote Control Access Sensor Transceiver 3
3
1151 BK/WH
BOP
J321
BTM+ (UD5/UD7/BOP
(BTM+(BOP/UD5/UD7)) ((UD5/UD7)+BOP)
(UD5/UD7) +(BOP/BTM)
BTM-UD5 -UD7-BOP
(UD5/UD7) -BTM-BOP
X1 14
X1 10
K84 Keyless Entry Control Module
K182 Parking Assist Control Module
BTM/UD5/UD7/BOP
G300
5502254

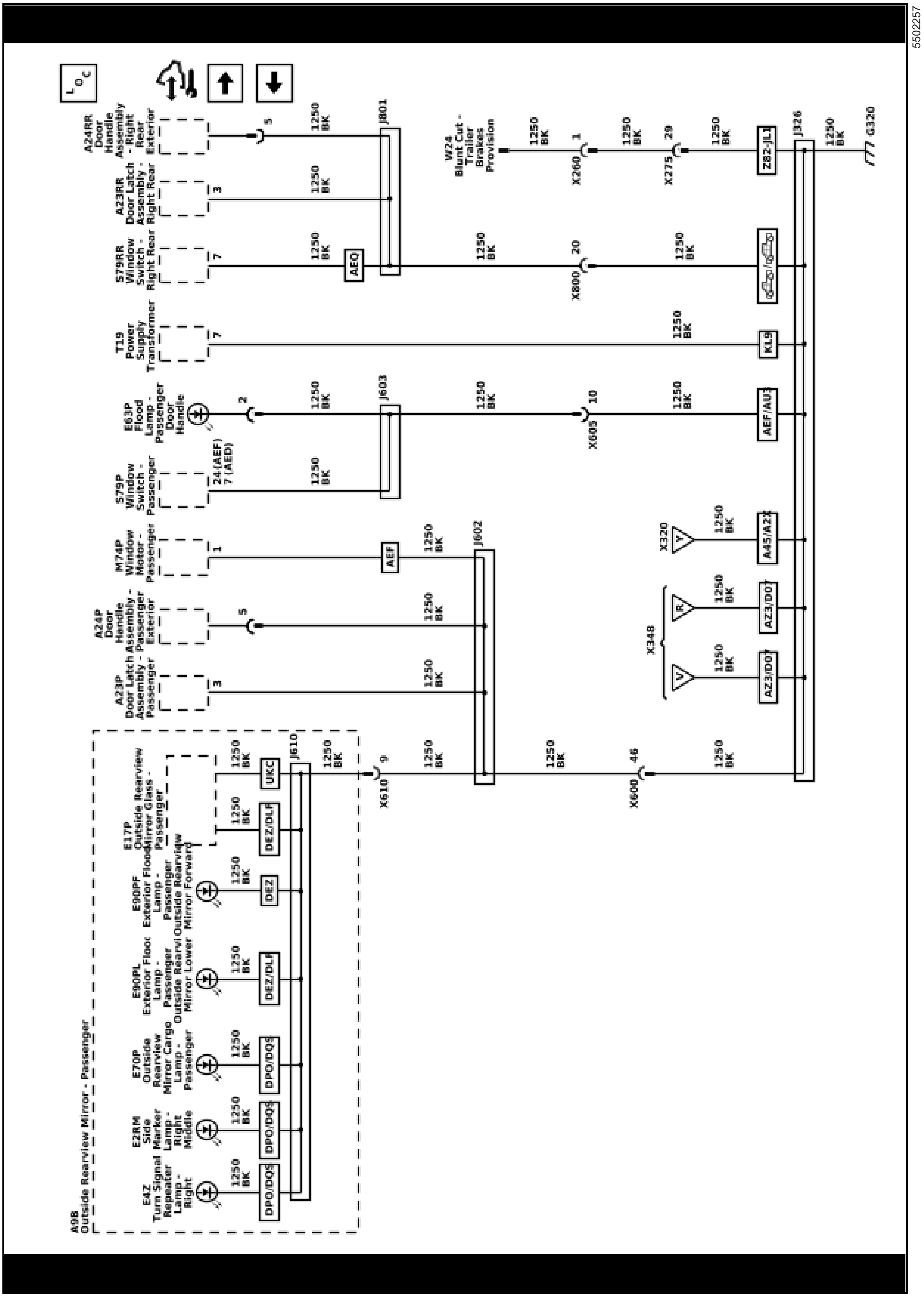
Ground Distribution Schematics (G300 (3 of 3))


A9A
Outside Rearview Mirror - Driver
E4Y Turn Signal Repeater Lamp - Left
E2LM Side Marker Lamp - Left Middle
E70D Outside Rearview Mirror Cargo Lamp - Driver
E90DF Exterior Flood Lamp - Driver Outside Rearview Mirror Forward
E90DL Exterior Flood Lamp - Driver Outside Rearview Mirror Lower
E17D Outside Rearview Mirror Glass - Driver
X2 A
1150 BK
DPO/DQS
DEZ/DLF
DEZ
UKC
J510
X510 9
A23D Door Latch Assembly - Driver
A24D Door Handle Assembly - Driver Exterior
M74D Window Motor - Driver
S13D Door Lock Switch - Driver
S146 Window/ Outside Rearview Mirror Switch - Driver
E63D Flood Lamp - Driver Door Handle
3
5
1
4
24
2
J503
X505 30
AXG
AXG/AU3
J502
Z
X500
5502255

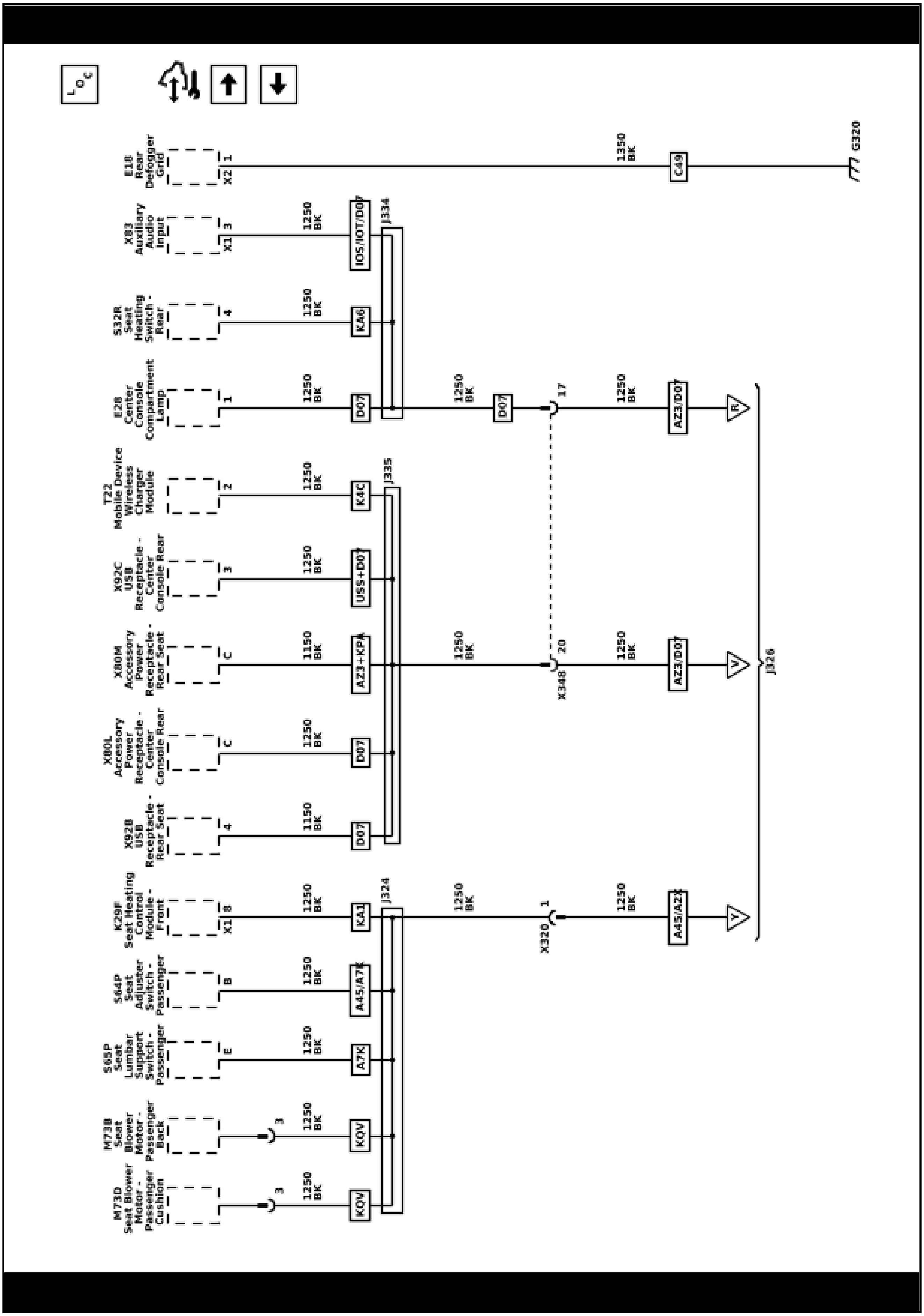
Ground Distribution Schematics (G308, G312, G400, and G420)


L O C
K36
Inflatable
Restraint
Sensing
and
Diagnostic
Module
X1 19
2551
BK/WH
K85
Passenger
Presence
Module
4
2551
BK/WH
X320 26
AL0
G308
K73
Telematics
Communication
Interface
Control Module
X1 8
4
2751
BK/WH
J231
X275 31
UE1
G312
A11
Radio
X1 3
6
45
P17
Info
Display
Module
X1 8
IOS/IOT/(IOR+UJ)
J233
T3
Audio
Amplifier
X1 8
UQA
K157
Video
Processing
Control
Module
X1 12
3
UVI/UVS
J282
X80C
Accessory
Power
Receptacle -
Cargo
5
6650
BK
X450 6
KC9/KCA
G400
K4
Assist Step
Control
Module
X1 2
2150
BK
BRS
G420
5502256

Ground Distribution Schematics (G320 (1 of 2))

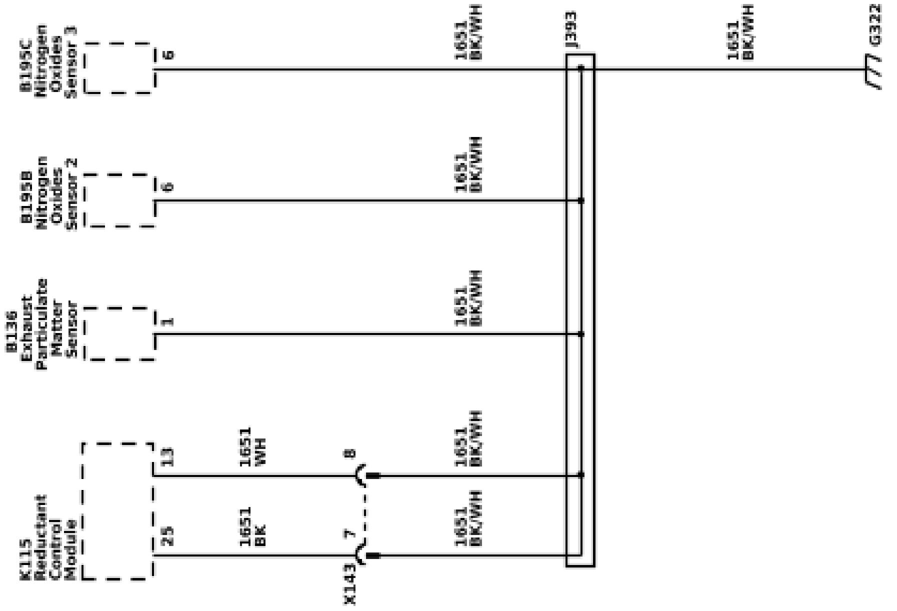

5502257
A9B Outside Rearview Mirror - Passenger
E4Z Turn Signal Repeater Lamp - Right
E2RM Side Marker Lamp - Right Middle
E70P Outside Rearview Mirror Cargo Lamp - Passenger
E90PL Exterior Floor Lamp - Passenger Outside Rearview Mirror Lower
E90PF Exterior Flood Lamp - Passenger Outside Rearview Mirror Forward
E17P Outside Rearview Mirror Glass - Passenger
A23P Door Latch Assembly - Passenger
A24P Door Handle Assembly - Passenger Exterior
M74P Window Motor - Passenger
S79P Window Switch - Passenger
E63P Flood Lamp - Passenger Door Handle
T19 Power Supply Transformer
S79RR Window Switch - Right Rear
A23RR Door Latch Assembly - Right Rear
A24RR Door Handle Assembly - Right Rear Exterior
W24 Blunt Cut - Trailer Brakes Provision
DPO/DQS
DPO/DQS
DPO/DQS
DEZ/DLF
DEZ
DEZ/DLF
UKC
AEF
AEQ
AEF/AU3
KL9
A45/A2X
AZ3/D07
AZ3/D07
Z82-JL1
J610
J602
J603
J801
J326
X610 9
X600 46
X605 10
X800 20
X260 1
X275 29
X320 Y
X348 R V
24 (AEF)
7 (AED)
1250 BK
3
5
1
2
7
G320

Ground Distribution Schematics (G320 (2 of 2))

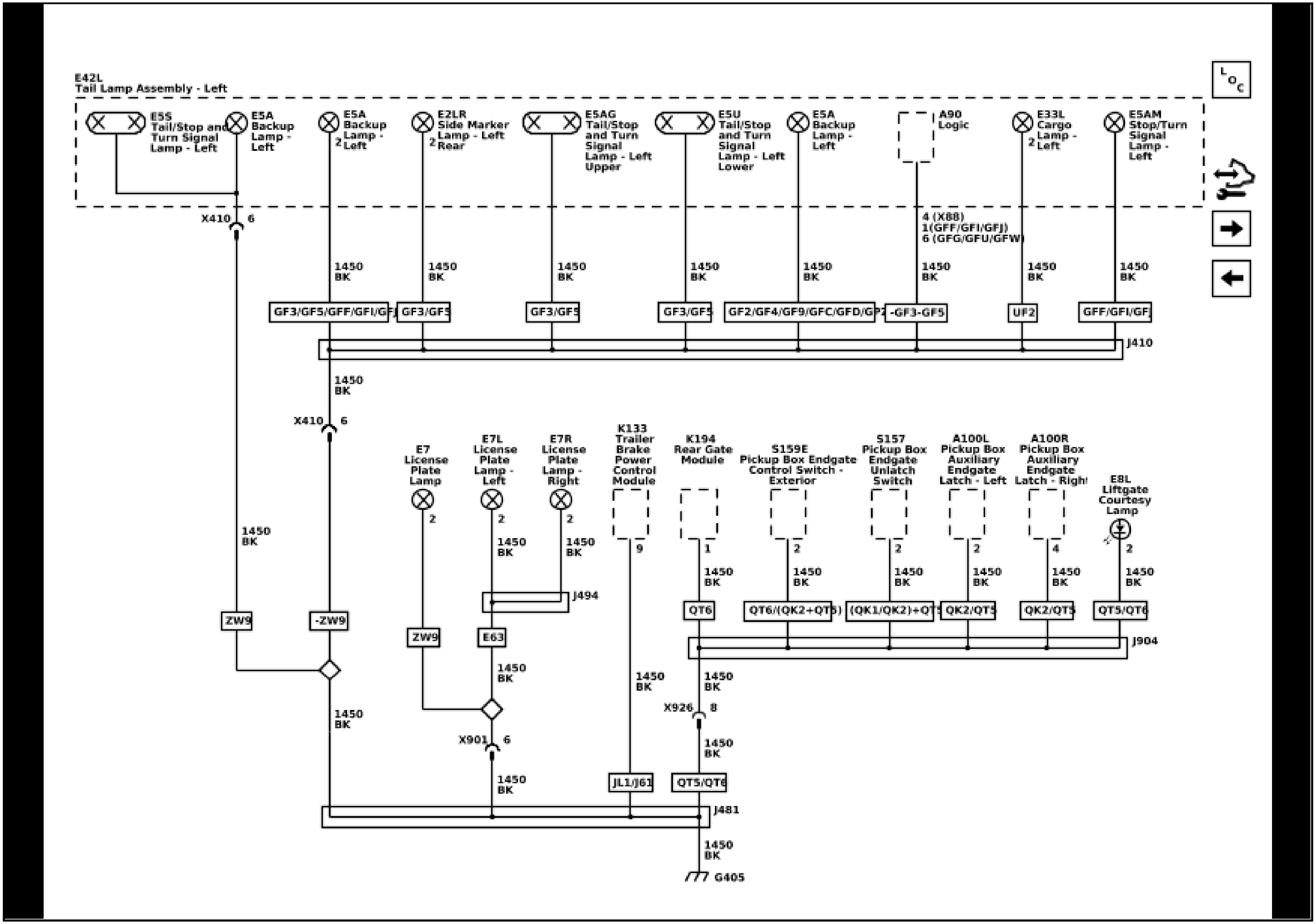

5502258
E18 Rear Defogger Grid
X2 1
1350 BK
C49
G320
X83 Auxiliary Audio Input
X1 3
1250 BK
IO5/IOT/D07
J334
S32R Seat Heating Switch - Rear
4
KA6
E28 Center Console Compartment Lamp
1
D07
17
AZ3/D07
R
T22 Mobile Device Wireless Charger Module
2
K4C
J335
X92C USB Receptacle - Center Console Rear
3
US5+D07
X80M Accessory Power Receptacle - Rear Seat
C
1150 BK
AZ3+KPA
20
X348
V
J326
X80L Accessory Power Receptacle - Center Console Rear
C
D07
X92B USB Receptacle - Rear Seat
4
D07
K29F Seat Heating Control Module - Front
X1 8
KA1
J324
1
X320
A45/A2X
S64P Seat Adjuster Switch - Passenger
B
A45/A7K
S65P Seat Lumbar Support Switch - Passenger
E
A7K
M73B Seat Blower Motor - Passenger Back
3
KQV
M73D Seat Blower Motor - Passenger Cushion
3
KQV

5502259

Ground Distribution Schematics (G322 (LM2))

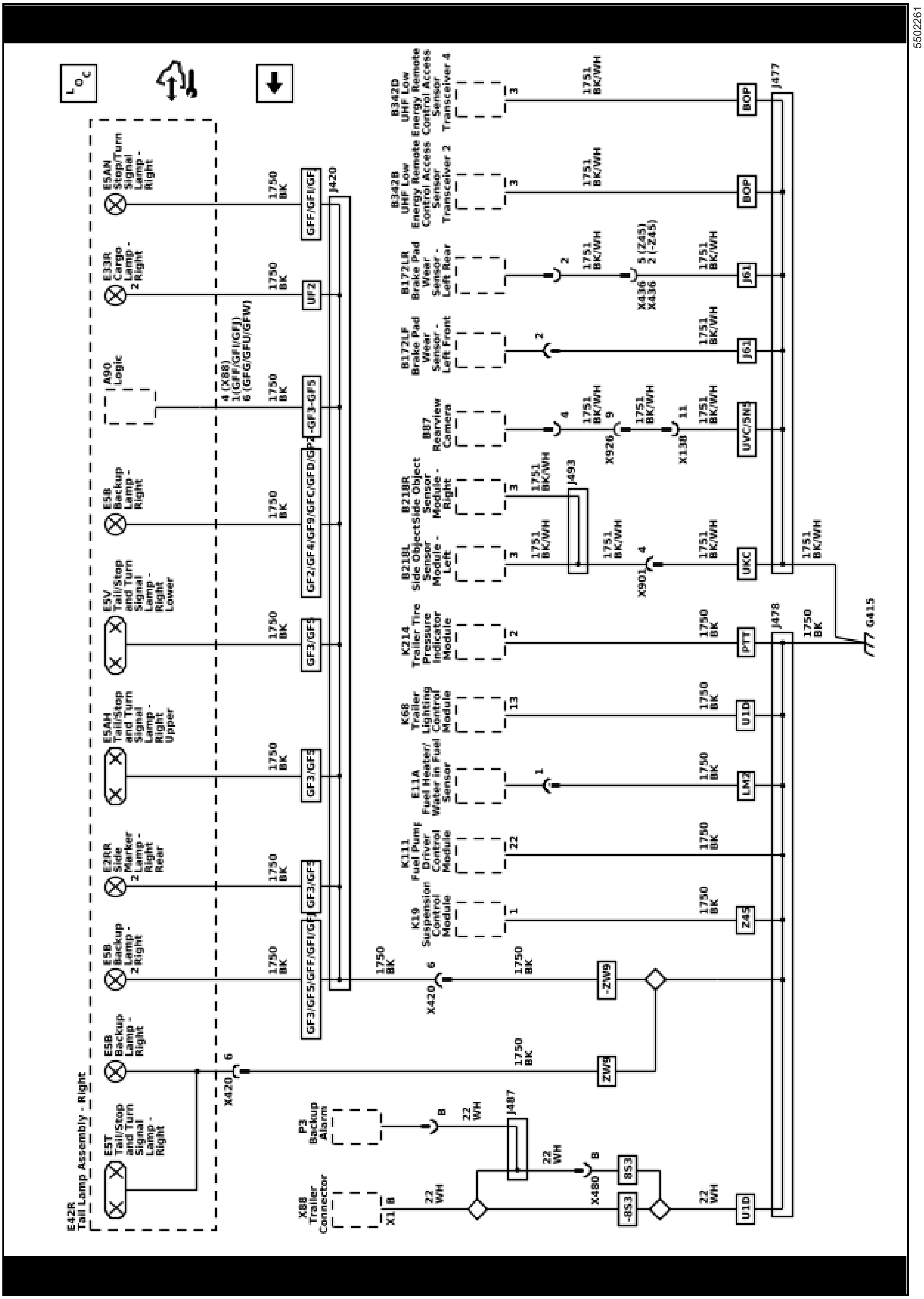

B195C Nitrogen Oxides Sensor 3
6
1651 BK/WH
J393
1651 BK/WH
G322
B195B Nitrogen Oxides Sensor 2
6
1651 BK/WH
B136 Exhaust Particulate Matter Sensor
1
1651 BK/WH
K115 Reductant Control Module
13
1651 WH
8
1651 BK/WH
25
1651 BK
7
X143
1651 BK/WH

Ground Distribution Schematics (G405)

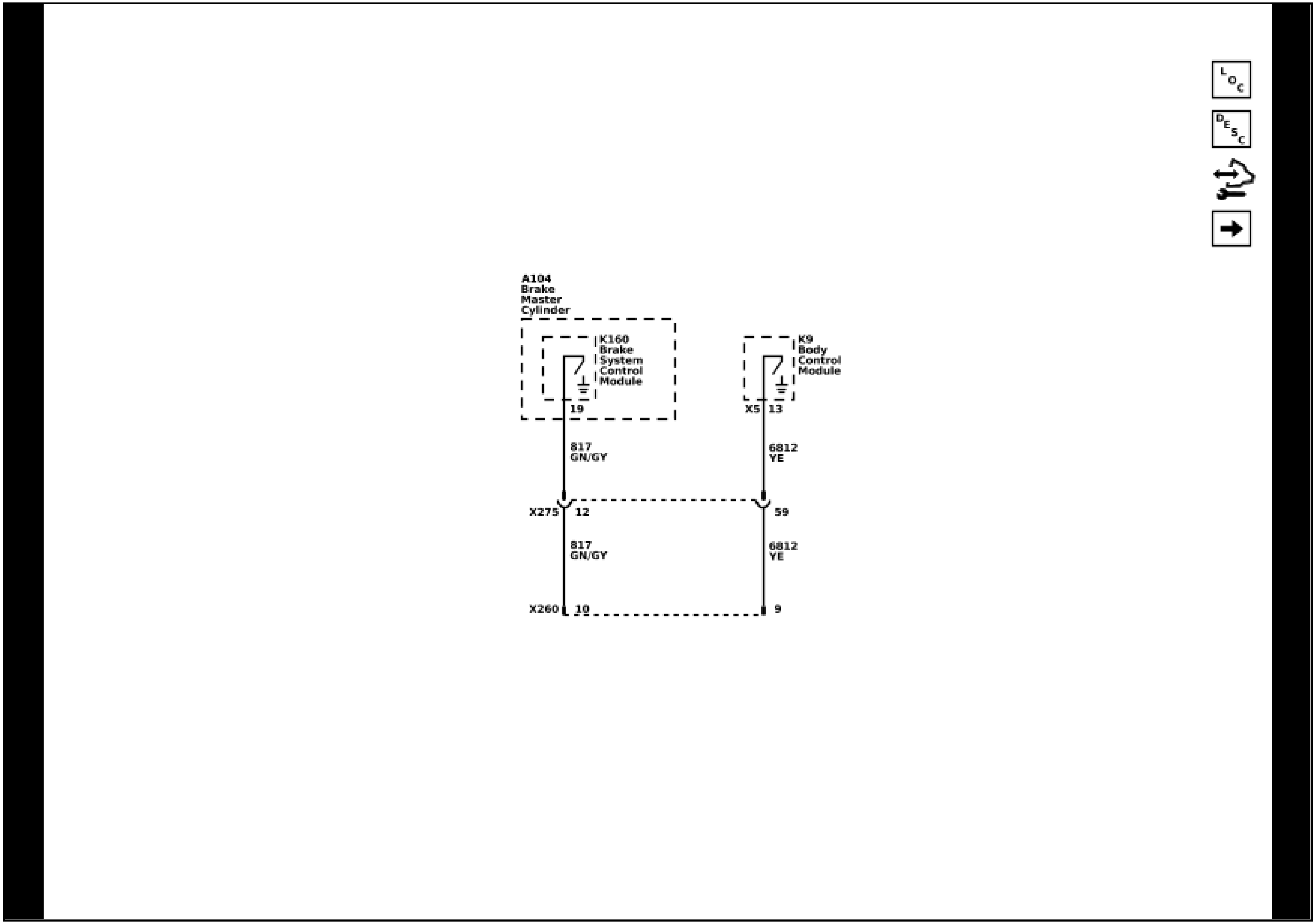

E42L
Tail Lamp Assembly - Left
E5S
Tail/Stop and Turn Signal Lamp - Left
E5A
Backup Lamp - Left
E5A
Backup Lamp - Left
2
E2LR
Side Marker Lamp - Left Rear
2
E5AG
Tail/Stop and Turn Signal Lamp - Left Upper
E5U
Tail/Stop and Turn Signal Lamp - Left Lower
E5A
Backup Lamp - Left
A90
Logic
E33L
Cargo Lamp - Left
2
E5AM
Stop/Turn Signal Lamp - Left
X410 6
4 (X88)
1(GFF/GFI/GFJ)
6 (GFG/GFU/GFW)
1450 BK
GF3/GF5/GFF/GFI/GFJ
GF3/GF5
GF3/GF5
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GP2
-GF3-GF5
UF2
GFF/GFI/GFJ
J410
X410 6
E7
License Plate Lamp
E7L
License Plate Lamp - Left
E7R
License Plate Lamp - Right
K133
Trailer Brake Power Control Module
K194
Rear Gate Module
S159E
Pickup Box Endgate Control Switch - Exterior
S157
Pickup Box Endgate Unlatch Switch
A100L
Pickup Box Auxiliary Endgate Latch - Left
A100R
Pickup Box Auxiliary Endgate Latch - Right
E8L
Liftgate Courtesy Lamp
2
9
1
4
J494
ZW9
-ZW9
ZW9
E63
QT6
QT6/(QK2+QT5)
(QK1/QK2)+QT5
QK2/QT5
QK2/QT5
QT5/QT6
J904
X926 8
X901 6
JL1/J61
QT5/QT6
J481
G405

5502260

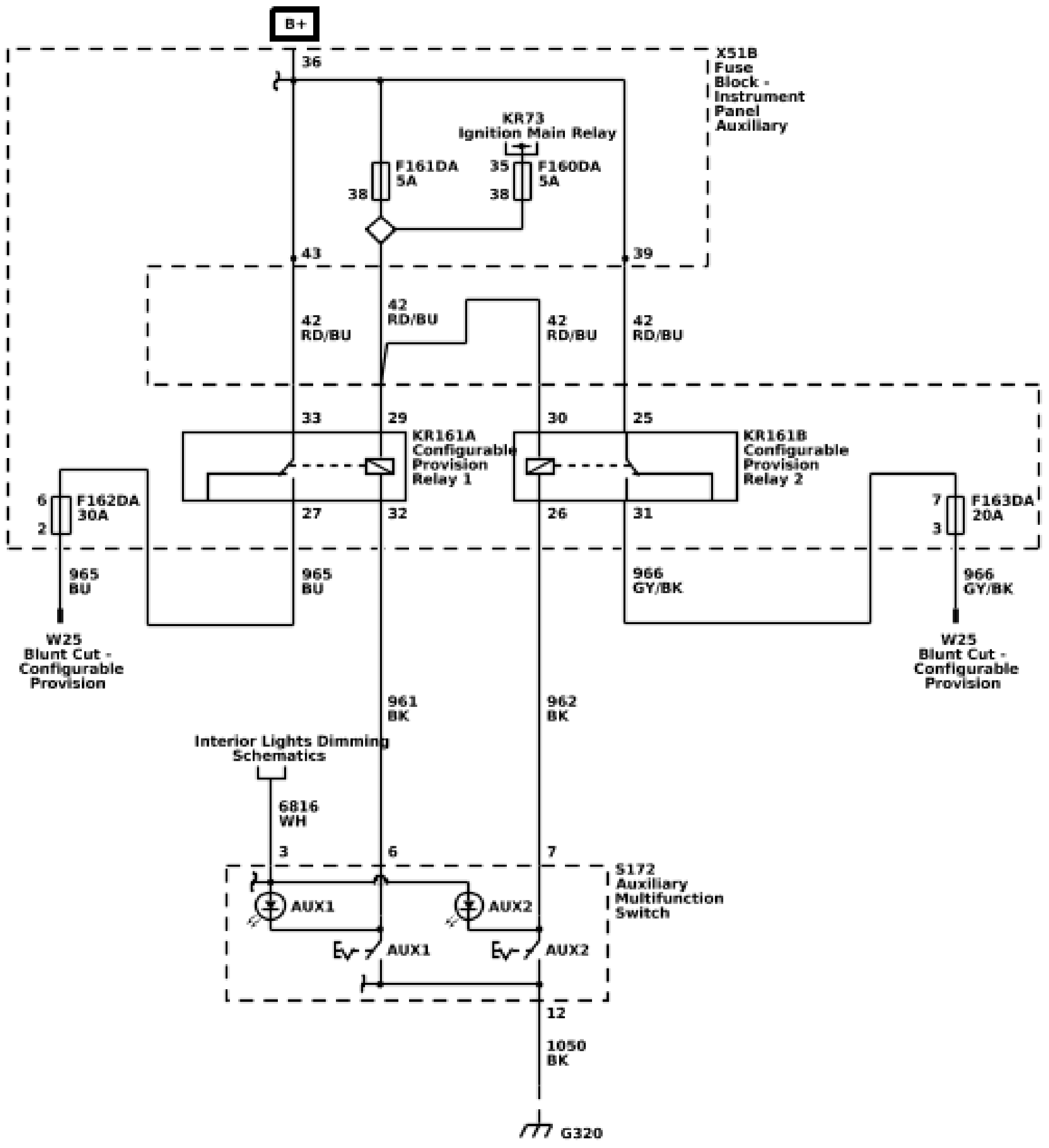
Ground Distribution Schematics (G415)


5502261
E42R Tail Lamp Assembly - Right
E5T Tail/Stop and Turn Signal Lamp - Right
E58 Backup Lamp - Right
E58 Backup Lamp - 2 Right
E2RR Side Marker Lamp - 2 Right Rear
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E5V Tail/Stop and Turn Signal Lamp - Right Lower
E58 Backup Lamp - Right
A90 Logic
E33R Cargo Lamp - 2 Right
E5AN Stop/Turn Signal Lamp - Right
1750 BK
GF3/GF5/GFF/GFI/GFJ
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GP2
GF3-GF5
4 (X88)
1(GFF/GFI/GFJ)
6 (GFG/GFU/GFW)
UF2
GFF/GFI/GF
J420
X420
6
ZW9
-ZW9
P3 Backup Alarm
X88 Trailer Connector
X1 B
B
22 WH
J487
X480
8S3
-8S3
K19 Suspension Control Module
1
K111 Fuel Pump Driver Control Module
22
E11A Fuel Heater/ Water in Fuel Sensor
K68 Trailer Lighting Control Module
13
K214 Trailer Tire Pressure Indicator Module
2
B218L Side Object Sensor Module - Left
3
B218R Side Object Sensor Module - Right
J493
X901
4
B87 Rearview Camera
X926
9
X130
11
B172LF Brake Pad Wear Sensor - Left Front
B172LR Brake Pad Wear Sensor - Left Rear
X436
5 (Z45)
2 (-Z45)
B342B UHF Low Energy Remote Control Access Sensor Transceiver 2
B342D UHF Low Energy Remote Control Access Sensor Transceiver 4
1751 BK/WH
Z45
LM2
U1D
PTT
UKC
UVC/5N5
J61
BOP
J478
J477
G415

Upfitter Provision Schematics (Upfitter Provisions - Signals)

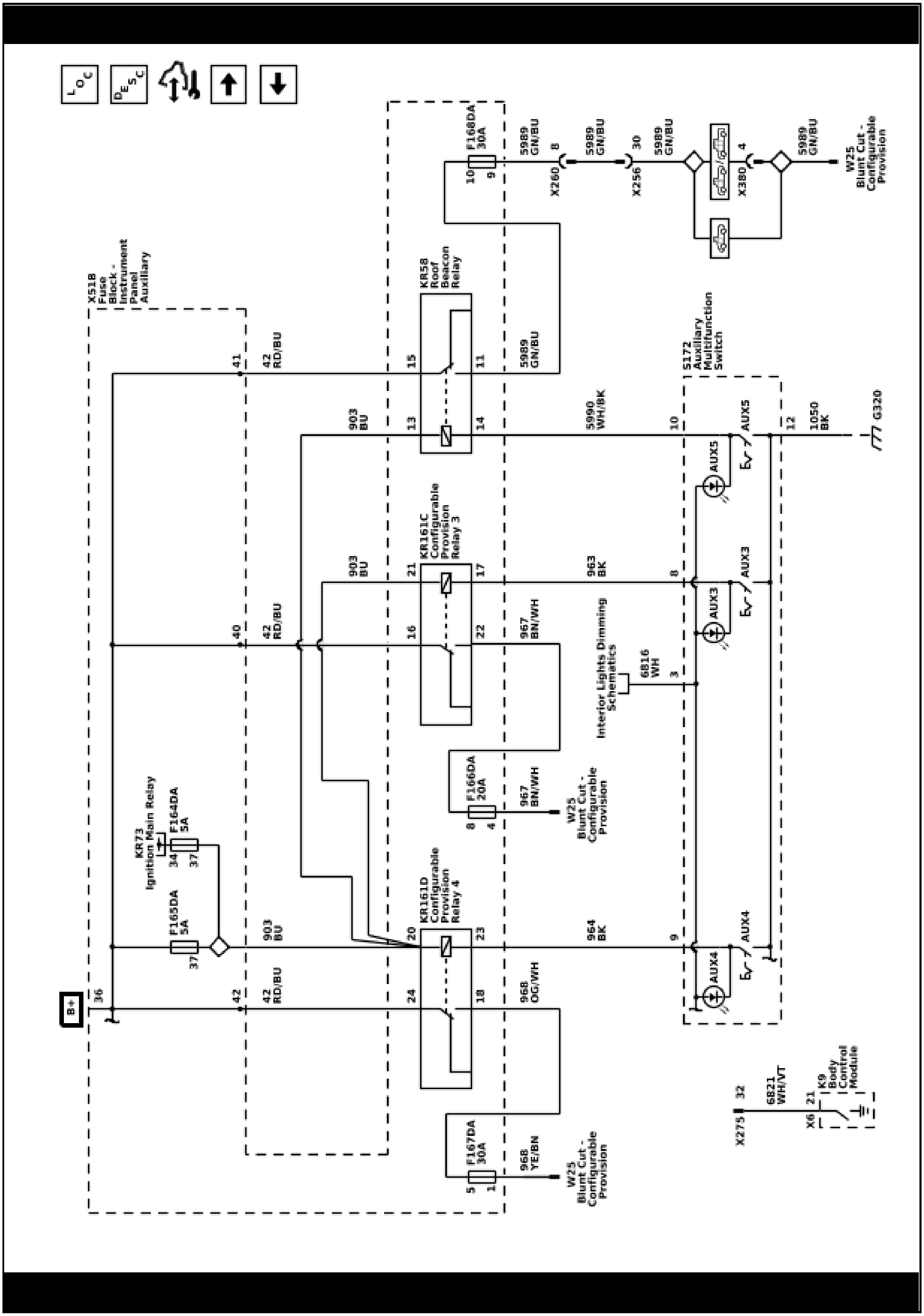

A104
Brake
Master
Cylinder
K160
Brake
System
Control
Module
19
817
GN/GY
X275
12
817
GN/GY
X260
10
K9
Body
Control
Module
X5
13
6812
YE
59
6812
YE
9
5502262

Upfitter Provision Schematics (Upfitter Provisions - 1 of 2 (9L7))


B+
36
X51B Fuse Block - Instrument Panel Auxiliary
KR73 Ignition Main Relay
F161DA 5A
38
35
F160DA 5A
38
43
39
42 RD/BU
42 RD/BU
42 RD/BU
42 RD/BU
33
29
30
25
KR161A Configurable Provision Relay 1
KR161B Configurable Provision Relay 2
6
2
F162DA 30A
27
32
26
31
7
3
F163DA 20A
965 BU
965 BU
966 GY/BK
966 GY/BK
W25 Blunt Cut - Configurable Provision
W25 Blunt Cut - Configurable Provision
961 BK
962 BK
Interior Lights Dimming Schematics
6816 WH
3
6
7
S172 Auxiliary Multifunction Switch
AUX1
AUX2
AUX1
AUX2
12
1050 BK
G320

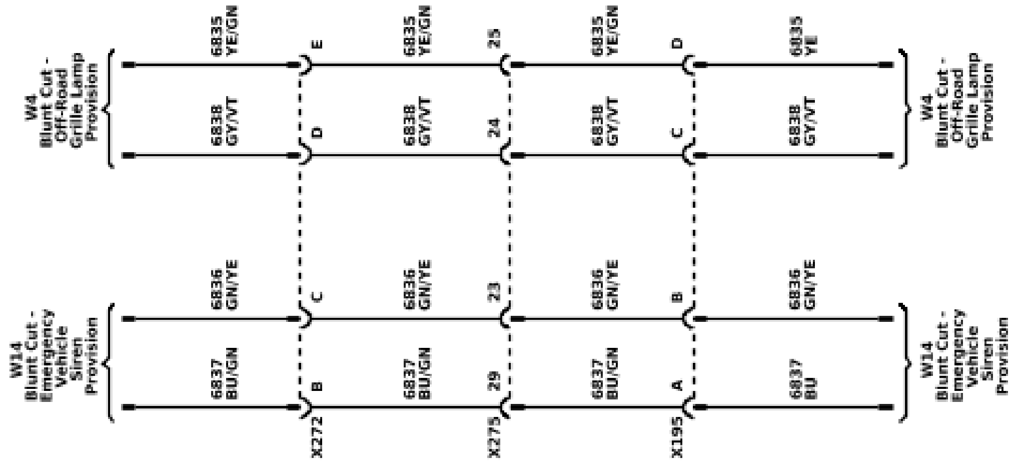
5502263

Upfitter Provision Schematics (Upfitter Provisions - 2 of 2 (9L7))

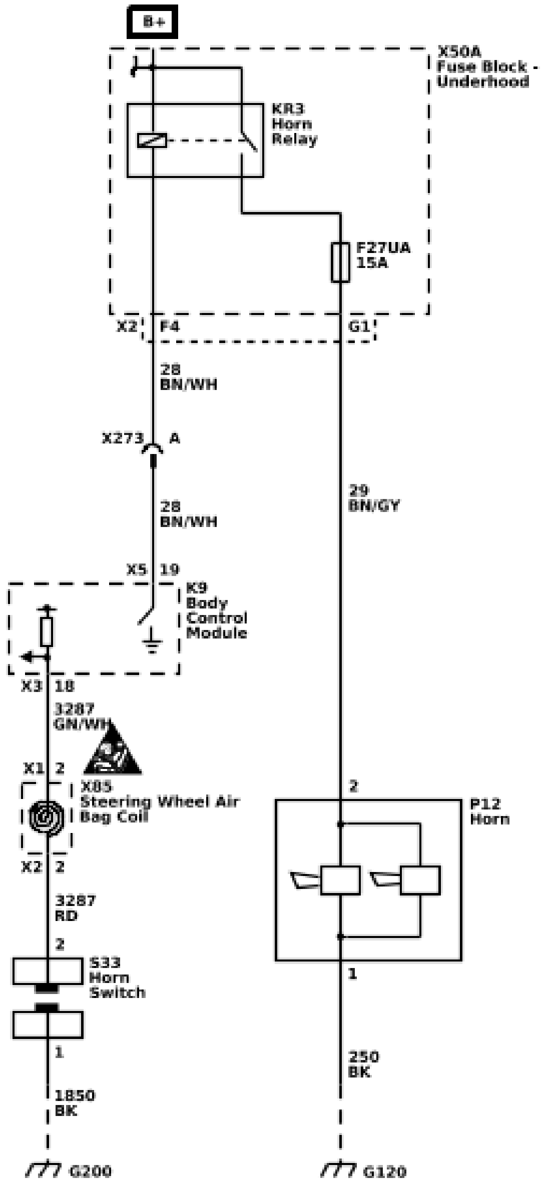

5502264
LOC
DESC
B+
X51B Fuse Block - Instrument Panel Auxiliary
36
41
40
42
42 RD/BU
903 BU
KR73 Ignition Main Relay
F165DA 5A
F164DA 5A
34
37
KR58 Roof Beacon Relay
15
13
11
14
KR161C Configurable Provision Relay 3
21
16
17
22
KR161D Configurable Provision Relay 4
20
24
23
18
F168DA 30A
10
9
F166DA 30A
8
4
F167DA 30A
5
1
5989 GN/BU
X260
X256
X380
30
4
W25 Blunt Cut - Configurable Provision
5990 WH/BK
963 BK
967 BN/WH
964 BK
968 OG/WH
968 YE/BN
S172 Auxiliary Multifunction Switch
AUX5
AUX3
AUX4
10
8
3
9
12
1050 BK
G320
6816 WH
Interior Lights Dimming Schematics
X275
32
6821 WH/VT
X6
21
K9 Body Control Module

Upfitter Provision Schematics (Grille Lights and Siren Provisions (6J3))

5502265

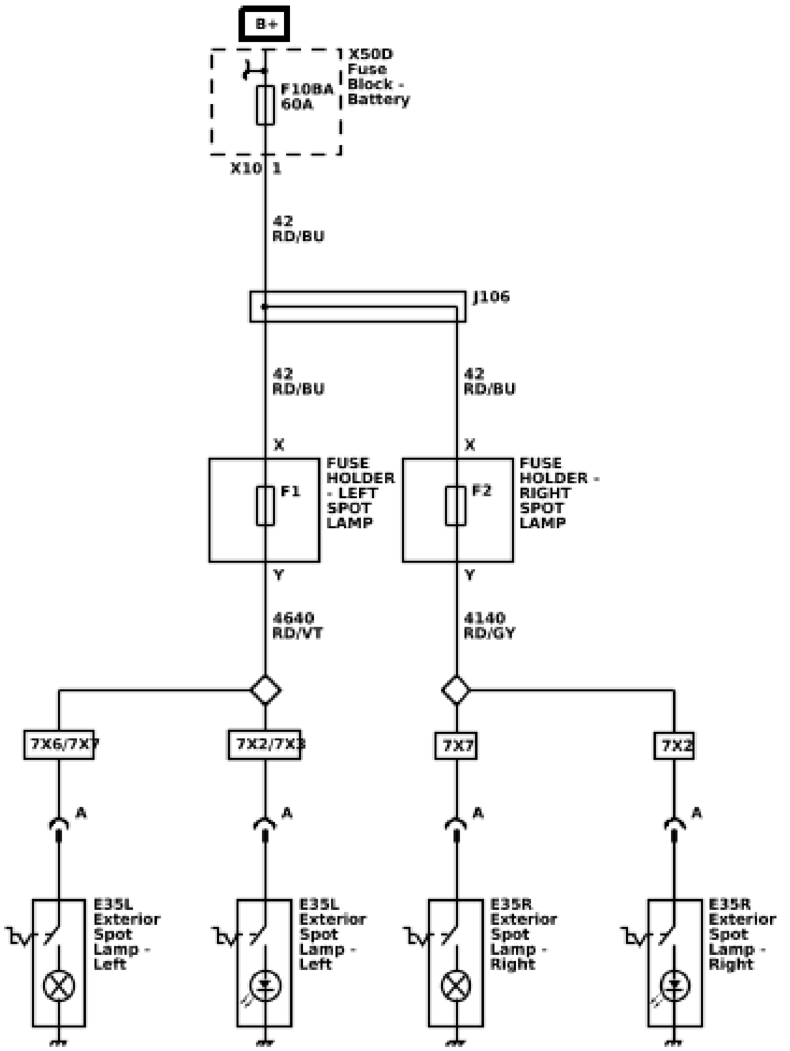

W14
Blunt Cut -
Emergency
Vehicle
Siren
Provision
W4
Blunt Cut -
Off-Road
Grille Lamp
Provision
6837
BU/GN
6836
GN/YE
6838
GY/VT
6835
YE/GN
X272
B
C
D
E
X275
29
23
24
25
X195
A
B
C
D
6837
BU
6836
GN/YE
6838
GY/VT
6835
YE
W14
Blunt Cut -
Emergency
Vehicle
Siren
Provision
W4
Blunt Cut -
Off-Road
Grille Lamp
Provision

Upfitter Provision Schematics (Horn Provision (6J4))


B+
X50A
Fuse Block - Underhood
KR3
Horn
Relay
F27UA
15A
X2
F4
G1
28
BN/WH
X273
A
28
BN/WH
29
BN/GY
X5
19
K9
Body
Control
Module
X3
18
3287
GN/WH
X1
2
X85
Steering Wheel Air
Bag Coil
X2
2
3287
RD
2
S33
Horn
Switch
1
1850
BK
G200
2
P12
Horn
1
250
BK
G120

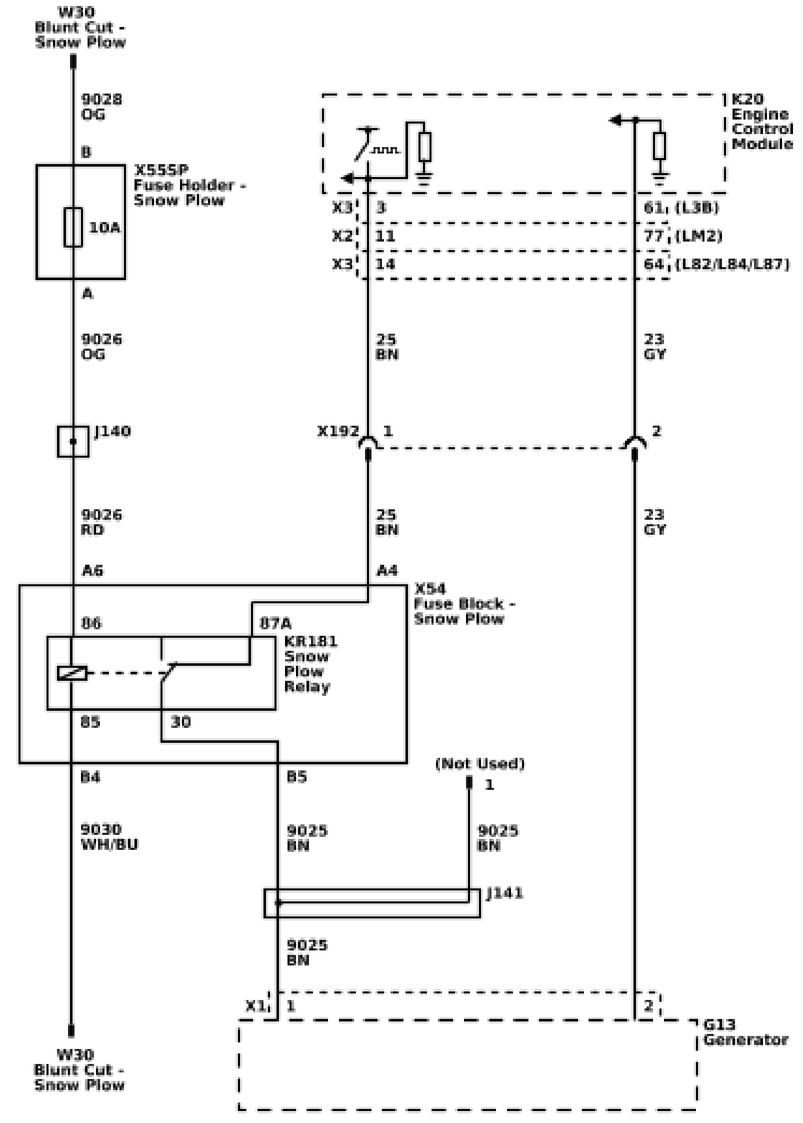
5502266

Upfitter Provision Schematics (Spot Lamps (7X2/7X3/7X6/7X7))


B+
X50D Fuse Block - Battery
F10BA 60A
X10 1
42 RD/BU
J106
42 RD/BU
42 RD/BU
X
X
F1
FUSE HOLDER - LEFT SPOT LAMP
F2
FUSE HOLDER - RIGHT SPOT LAMP
Y
Y
4640 RD/VT
4140 RD/GY
7X6/7X7
7X2/7X3
7X7
7X2
A
A
A
A
E35L Exterior Spot Lamp - Left
E35L Exterior Spot Lamp - Left
E35R Exterior Spot Lamp - Right
E35R Exterior Spot Lamp - Right

5502267

Upfitter Provision Schematics (Snow Plow Provisions (VYU))


W30 Blunt Cut - Snow Plow
9028 OG
B
X555P Fuse Holder - Snow Plow
10A
A
9026 OG
J140
9026 RD
A6
86
85
B4
9030 WH/BU
W30 Blunt Cut - Snow Plow
K20 Engine Control Module
X3 3
X2 11
X3 14
61 (L3B)
77 (LM2)
64 (L82/L84/L87)
25 BN
23 GY
X192 1
2
25 BN
23 GY
A4
X54 Fuse Block - Snow Plow
87A
KR181 Snow Plow Relay
30
B5
(Not Used)
1
9025 BN
9025 BN
J141
9025 BN
X1 1
2
G13 Generator

5502268

Component Locator

Master Electrical Component List

Code	Name	Option	Location	Locator View	Connector End View
A10	Inside Rearview Mirror	—	In the passenger compartment, at the top center of the windshield	*Headliner Components*	- *A10 Inside Rearview Mirror X1 (DD8/DRZ)* - *A10 Inside Rearview Mirror X2 (DRZ)*
A100L	Pickup Box Auxiliary Endgate Latch - Left	QK2	At the rear of the vehicle, within endgate, on the left side	*Endgate Components (QK2)*	*A100L Pickup Box Auxiliary Endgate Latch - Left (QK2 +QT5)*
A100R	Pickup Box Auxiliary Endgate Latch - Right	QK2	At the rear of the vehicle, within endgate, on the right side	*Endgate Components (QK2)*	*A100R Pickup Box Auxiliary Endgate Latch - Right (QK2 +QT5)*
A104	Brake Master Cylinder	—	In the engine compartment, left rear, bolted to the bulkhead	—	—
A11	Radio	—	In the passenger compartment, right front, below passenger a-pillar, between the instrument panel and bulkhead	*Instrument Panel - Rear*	- *A11 Radio X1 (IOR)* - *A11 Radio X1 (IOS/IOT)* - *A11 Radio X11 (IOS/IOT)* - *A11 Radio X2 (IOR)* - *A11 Radio X2 (IOS/IOT)* - *A11 Radio X3 (IOR)* - *A11 Radio X3 (IOS/IOT)* - *A11 Radio X4 ((IOS/IOT)+D07)* - *A11 Radio X4 (IOR+(UIR/UIJ))* - *A11 Radio X5 (IOR)* - *A11 Radio X5 (UVB/UVI/UV2)* - *A11 Radio X6 (IOR)* - *A11 Radio X6 (IOS/IOT)* - *A11 Radio X7 (IOS/IOT)* - *A11 Radio X8 ((IOS/IOT)-UE1)* - *A11 Radio X8 (IOR+U2K)* - *A11 Radio X9 ((IOS/IOT)+U2K)*
A14D	Seat Lumbar Support Pump - Driver	A2X	In the passenger compartment, left front, within driver seat	*Driver Seat Components*	*A14D Seat Lumbar Support Pump - Driver (A2X-A45)*
A14P	Seat Lumbar Support Pump - Passenger	A7K	In the passenger compartment, right front, within passenger seat	*Passenger Seat Components*	*A14P Seat Lumbar Support Pump - Passenger (A7K)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
A16	Transfer Case Motor	NP0/NQH	Under the vehicle, mounted to the rear of the transfer case	—	A16 Transfer Case Motor (NP0/NQH)
A22	Radio Controls	UIR	In the passenger compartment, at the center of the Instrument Panel, part of the Info Display Module	Instrument Panel - Front	A22 Radio Controls (IOR)
A23D	Door Latch Assembly - Driver	—	In the driver door, at the rear center	Driver Door Components	A23D Door Latch Assembly - Driver
A23LR	Door Latch Assembly - Left Rear	Extended Cab/ Crew Cab	In the left rear door, at the rear center	Right Rear Door Components (Extended Cab/Crew Cab)	A23LR Door Latch Assembly - Left Rear (EXTENDED CAB/ CREW CAB)
A23P	Door Latch Assembly - Passenger	—	In the passenger door, at the rear center	Passenger Door Components	A23P Door Latch Assembly - Passenger
A23RR	Door Latch Assembly - Right Rear	Extended Cab/ Crew Cab	In the right rear door, at the rear center	Left Rear Door Components (Extended Cab/Crew Cab)	A23RR Door Latch Assembly - Right Rear (EXTENDED CAB/CREW CAB)
A24D	Door Handle Assembly - Driver Exterior	—	Outside of the vehicle, at the rear of the driver door	—	A24D Door Handle Assembly - Driver Exterior
A24LR	Door Handle Assembly - Left Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the left rear door	Right Rear Door Components (Extended Cab/Crew Cab)	A24LR Door Handle Assembly - Left Rear Exterior (EXTENDED CAB/CREW CAB)
A24P	Door Handle Assembly - Passenger Exterior	—	Outside of the vehicle, at the rear of the passenger door	—	A24P Door Handle Assembly - Passenger Exterior
A24RR	Door Handle Assembly - Right Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the right rear door	Left Rear Door Components (Extended Cab/Crew Cab)	A24RR Door Handle Assembly - Right Rear Exterior (EXTENDED CAB/ CREW CAB)
A26	HVAC Controls	IOR	In the passenger compartment, at the center of the instrument panel, beneath P17 Info Display Module	Instrument Panel - Front	A26 HVAC Controls
A39	Reductant Tank	LM2	Under the vehicle, right side, in front of rear axle, inboard of right frame rail	—	A39 Reductant Tank (LM2)
A3L	Sunshade - Left	—	In the passenger compartment, at the front of the headliner, left side	Headliner Components	—
A3R	Sunshade - Right	—	In the passenger compartment, at the front of the headliner, right side	Headliner Components	—
A7	Fuel Pump and Level Sensor Assembly	—	Under the vehicle, left side, in front of rear axle, mounted in the fuel tank	—	A7 Fuel Pump and Level Sensor Assembly
A98	Front Overhead Console Assembly	—	In the passenger compartment, front center, mounted to headliner	Headliner Components	• A98 Front Overhead Console Assembly X1 • A98 Front Overhead Console Assembly X2
A99C	Pickup Box Endgate Latch - Center	QK1	At the rear of the vehicle, within the endgate, center	—	A99C Pickup Box Endgate Latch - Center (QK1+QT5)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
A99L	Pickup Box Endgate Latch - Left	QK2/QT6	At the rear of the vehicle, within endgate, on the left side	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *A99L Pickup Box Endgate Latch - Left (QK1)* • *A99L Pickup Box Endgate Latch - Left (QK2)*
A99R	Pickup Box Endgate Latch - Right	QK2/QT6	At the rear of the vehicle, within endgate, on the right side	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *A99R Pickup Box Endgate Latch - Right (QK1)* • *A99R Pickup Box Endgate Latch - Right (QK2)*
A9A	Outside Rearview Mirror - Driver	—	Outside the vehicle, at the front of the driver door	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	—
A9B	Outside Rearview Mirror - Passenger	—	Outside the vehicle, at the front of the passenger door	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	—
B1	A/C Refrigerant Pressure Sensor	—	• (L3B) In the engine compartment, left front, mounted to A/C high pressure line, near G1 A/C Compressor • (LV3) In the engine compartment, right front, attached to AC line, near right side of condenser •	• *Engine Components - Left Rear (L3B)* • *Radiator Support Components (LV3)*	• *B1 A/C Refrigerant Pressure Sensor (L3B)* • *B1 A/C Refrigerant Pressure Sensor (L82)* • *B1 A/C Refrigerant Pressure Sensor (L84/L87)* • *B1 A/C Refrigerant Pressure Sensor (LM2)* • *B1 A/C Refrigerant Pressure Sensor (LV3)*
B107	Accelerator Pedal Position Sensor	—	In the passenger compartment, in the driver side foot well, under the instrument panel	*Behind Instrument Panel - Left*	*B107 Accelerator Pedal Position Sensor*
B10B	Ambient Light/ Sunload Sensor	—	In the passenger compartment, at the top middle of the instrument panel	*Instrument Panel - Front*	*B10B Ambient Light/ Sunload Sensor (C4P/CJ2)*
B110	Battery Sensor Module	KL9	In the engine compartment, right side, near C1 Battery negative cable	*Engine Compartment Components - Top*	• *B110 Battery Sensor Module X1 (KL9)* • *B110 Battery Sensor Module X2 (KL9)*
B111	Turbocharger Boost Sensor	L3B	In the engine compartment, left front, mounted to the top left side of the intercooler	—	*B111 Turbocharger Boost Sensor (L3B)*
B118B	Windshield Washer Fluid Level Switch	—	In the engine compartment, attached to the washer fluid reservoir, behind E13LA Headlamp Assembly - Left	*Engine Compartment Components - Top*	*B118B Windshield Washer Fluid Level Switch*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B12A	Transmission Fluid Pressure Switch	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
B13	Transmission Fluid Temperature Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	• *Automatic Transmission Components - Valve Body (MQB)* • *Automatic Transmission Components - Valve Body (MQE)*	• *B13 Transmission Fluid Temperature Sensor (MQB)* • *B13 Transmission Fluid Temperature Sensor (MQE)*
B130A	Exhaust Gas Recirculation Temperature Sensor 1	LM2	In the engine compartment, right side, beneath M103 Turbocharger Vane Position Actuator	*Engine Components - Right Rear (LM2)*	*B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)*
B130C	Exhaust Gas Recirculation Temperature Sensor 3	LM2	In the engine compartment, right rear, attached to exhaust gas recirculation cooler	*Engine Components - Right Rear (LM2)*	*B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)*
B131A	Exhaust Temperature Sensor 1	LM2	In the engine compartment, right front, mounted in exhaust, in front of B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor	*Engine Components - Right Rear (LM2)*	*B131A Exhaust Temperature Sensor 1 (LM2)*
B131B	Exhaust Temperature Sensor 2	LM2	In the engine compartment, right front, mounted in exhaust, near Q61 Reductant Injector	*Engine Components - Right Rear (LM2)*	*B131B Exhaust Temperature Sensor 2 (LM2)*
B131C	Exhaust Temperature Sensor 3	LM2	In the engine compartment, mounted in exhaust, near M64 Starter Motor	—	*B131C Exhaust Temperature Sensor 3 (LM2)*
B136	Exhaust Particulate Matter Sensor	LM2	On the underbody, mounted to the inboard side of the right frame rail, forward of the right rear shock	—	*B136 Exhaust Particulate Matter Sensor (LM2)*
B137B	Power Steering Shaft Torque/Position Sensor	—	Under the vehicle, in the engine compartment, left front, behind the left side of the power steering rack.	*Engine Compartment Components - Bottom*	*B137B Power Steering Shaft Torque/Position Sensor*
B139	Transfer Case 2WD/4WD Actuator Position Sensor	NP0/NQH	Under the vehicle, mounted to the transfer case	—	*B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)*
B14A	Transmission Output Shaft Speed Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	• *Automatic Transmission Components - Case (MQB)* • *Automatic Transmission Components - Case (MQE)* • *Automatic Transmission Components (MYC)*	*B14A Transmission Output Shaft Speed Sensor (MQB)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B14C	Transmission Input Shaft Speed Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	• *Automatic Transmission Components - Case (MQB)* • *Automatic Transmission Components - Case (MQE)*	*B14C Transmission Input Shaft Speed Sensor (MQB)*
B14D	Transmission Intermediate Shaft Speed Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	*Automatic Transmission Components - Case (MQE)*	—
B14DA	Transmission Intermediate Speed Sensor 1	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	*Automatic Transmission Components - Case (MQB)*	*B14DA Transmission Intermediate Speed Sensor 1 (MQB)*
B14DB	Transmission Intermediate Speed Sensor 2	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	*Automatic Transmission Components - Case (MQB)*	*B14DB Transmission Intermediate Speed Sensor 2 (MQB)*
B15	Transmission Internal Mode Switch	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	*Automatic Transmission Components - Case (MQE)*	—
B150	Fuel Tank Pressure Sensor	L3B/L82/L84/L87/LV3	Under the vehicle, at the top of the fuel tank	—	*B150 Fuel Tank Pressure Sensor (-LM2)*
B152LF	Suspension Position Sensor - Left Front	Z45	Under the vehicle, at the left front corner of the frame	—	*B152LF Suspension Position Sensor - Left Front (Z45)*
B152R	Suspension Position Sensor - Rear	Z45	Under the vehicle, at the rear of the vehicle	—	*B152R Suspension Position Sensor - Rear (Z45)*
B152RF	Suspension Position Sensor - Right Front	Z45	Under the vehicle, at the right front corner of the frame	—	*B152RF Suspension Position Sensor - Right Front (Z45)*
B153D	Seat Belt Buckle - Driver	—	In the passenger compartment, at the inboard side of the drive seat	—	—
B153P	Seat Belt Buckle - Passenger	—	In the passenger compartment, at the inboard side of the passenger seat	—	—
B154	Diesel Particulate Filter Exhaust Differential Pressure Sensor	LM2	In the engine compartment, right side, mounted in the exhaust, in front of M103 Turbocharger Vane Position Actuator	—	*B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)*
B160	Windshield Temperature and Inside Moisture Sensor	—	In the passenger compartment, front center, mounted to top of windshield	*Headliner Components*	*B160 Windshield Temperature and Inside Moisture Sensor (ASV)*
B172LF	Brake Pad Wear Sensor - Left Front	—	Under the vehicle, at left front caliper	—	*B172LF Brake Pad Wear Sensor - Left Front (J61)*
B172LR	Brake Pad Wear Sensor - Left Rear	—	Under the vehicle, at left rear caliper	*Brake and Suspension Components*	*B172LR Brake Pad Wear Sensor - Left Rear (J61)*
B174G	Frontview Camera - Grille	UVS	At the front of the vehicle, front center, near the grille	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	*B174G Frontview Camera - Grille (UVS)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B174W	Frontview Camera - Windshield	ASV	In the passenger compartment, at the top middle of the windshield	Headliner Components	B174W Frontview Camera - Windshield (UEU/UHX)
B18	Battery Current Sensor	-KL9	In the engine compartment, right rear, near negative battery cable at bulkhead	Engine Compartment Components - Top	B18 Battery Current Sensor (-KL9)
B193A	Charge Air Cooler Inlet Temperature Sensor	LM2	In the engine compartment, mounted to the left side of the air charge cooler	—	B193A Charge Air Cooler Inlet Temperature Sensor (LM2)
B193B	Charge Air Cooler Outlet Temperature Sensor	LM2	In the engine compartment, mounted to the front of the air charge cooler	—	B193B Charge Air Cooler Outlet Temperature Sensor (LM2)
B194	Reductant Pressure Sensor	LM2	Under the vehicle, right side, forward of rear axle, within reductant tank, part of A38 Reductant Pump and Sensor Assembly	—	—
B195A	Nitrogen Oxides Sensor 1	LM2	In the engine compartment, attached to the exhaust pipe, on the top left rear side of the engine	—	B195A Nitrogen Oxides Sensor 1 (LM2)
B195B	Nitrogen Oxides Sensor 2	LM2	Under the vehicle, attached to the exhaust pipe, at the middle of the diesel particulate filter	—	B195B Nitrogen Oxides Sensor 2 (LM2)
B195C	Nitrogen Oxides Sensor 3	LM2	Under the vehicle, attached to the exhaust pipe	—	B195C Nitrogen Oxides Sensor 3 (LM2)
B198	Fuel Composition Sensor	—	Under the vehicle, mounted to the left side of the frame	—	B198 Fuel Composition Sensor (FHS)
B20	Brake Fluid Level Switch	—	In the engine compartment, mounted in the brake fluid reservoir	—	B20 Brake Fluid Level Switch
B203	Radiator Coolant Temperature Sensor	L3B/LM2	In the engine compartment, right front, attached to the right side of the radiator	Radiator Support Components (LM2)	• B203 Radiator Coolant Temperature Sensor (L3B) • B203 Radiator Coolant Temperature Sensor (LM2)
B212	Reductant Sensor Module	LM2	Under the vehicle, right side, attached to DEF tank	—	B212 Reductant Sensor Module (LM2)
B214	Reductant Temperature Sensor	LM2	Under the vehicle, right side, forward of rear axle, within reductant tank, part of A38 Reductant Pump and Sensor Assembly	—	—
B218L	Side Object Sensor Module - Left	UKC	Outside of the vehicle, left rear corner, mounted to the inside of the rear bumper	Rear Bumper Components	B218L Side Object Sensor Module - Left (UKC)
B218R	Side Object Sensor Module - Right	UKC	Outside of the vehicle, right rear corner, mounted to the inside of the rear bumper	Rear Bumper Components	B218R Side Object Sensor Module - Right (UKC)
B22	Brake Pedal Position Sensor	—	In the passenger compartment, in the driver side foot well, under the instrument panel	Behind Instrument Panel - Left	B22 Brake Pedal Position Sensor
B225L	Sideview Camera - Left	UVI/UV2	Outside of vehicle, left side, within A9A Outside Rearview Mirror - Driver	Driver Door Components	B225L Sideview Camera - Left (UVI/UVS)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B225R	Sideview Camera - Right	UVI/UV2	Outside of vehicle, right side, within A9B Outside Rearview Mirror - Passenger	*Passenger Door Components*	*B225R Sideview Camera - Right (UVI/UVS)*
B23	Camshaft Position Sensor	L82/L84/L87/ LM2/LV3	• (L82/L84/L87) In the engine compartment, front center, mounted to timing chain cover, above crankshaft harmonic balancer • (LM2) In the engine compartment, rear center, mounted to the right rear side of the engine block, above transmission bellhousing	*Engine Components - Left Front (L82/L84/ L87)*	• *B23 Camshaft Position Sensor (L82/L84/L87/ LV3)* • *B23 Camshaft Position Sensor (LM2)*
B23E	Camshaft Position Sensor - Exhaust	L3B	In the engine compartment, at the rear of the engine, mounted to the right rear of the camshaft carrier	• *Engine Components - Right Rear (L3B)* • *Engine Components - Right Rear (LM2)*	*B23E Camshaft Position Sensor - Exhaust (L3B)*
B23F	Camshaft Position Sensor - Intake	L3B	In the engine compartment, at the rear of the engine, mounted to the left rear of the camshaft carrier	*Engine Components - Right Rear (L3B)*	*B23F Camshaft Position Sensor - Intake (L3B)*
B24LF	Mobile Telephone Microphone - Left Front	—	In the passenger compartment, left front, attached to the headliner	*Headliner Components*	*B24LF Mobile Telephone Microphone - Left Front (UE1)*
B24RF	Mobile Telephone Microphone - Right Front	IOS/IOT	In the passenger compartment, right front, attached to the headliner	*Headliner Components*	*B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)*
B26	Crankshaft Position Sensor	—	• (L3B) In the engine compartment, left rear, mounted to rear of engine block. Below M64 Starter Motor • (L82/L84/L87) In the engine compartment, right rear, mounted to right rear side of engine block, behind M64 Starter Motor	• *Engine Components - Left Front (L3B)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *B26 Crankshaft Position Sensor (L3B)* • *B26 Crankshaft Position Sensor (L82)* • *B26 Crankshaft Position Sensor (L84/L87)* • *B26 Crankshaft Position Sensor (LM2)* • *B26 Crankshaft Position Sensor (LV3)*
B27D	Door Handle Switch - Driver Exterior	—	Outside of the vehicle, at the rear of the driver door, within A24D Door Handle Assembly - Driver Exterior	—	—
B27LR	Door Handle Switch - Left Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the left rear door, within A24LR Door Handle Assembly - Left Rear Exterior	*Right Rear Door Components (Extended Cab/Crew Cab)*	—
B27P	Door Handle Switch - Passenger Exterior	—	Outside of the vehicle, at the rear of the passenger door, within A24P Door Handle Assembly - Passenger Exterior	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B27RR	Door Handle Switch - Right Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the right rear door, within A24RR Door Handle Assembly - Right Rear Exterior	*Left Rear Door Components (Extended Cab/Crew Cab)*	—
B280	Automatic Transmission Accumulator Solenoid Valve	MQE	Under the vehicle, inside T12 Automatic Transmission Assembly	*Automatic Transmission Components - Valve Body (MQE)*	*B280 Automatic Transmission Accumulator Solenoid Valve (MQE)*
B303	Transmission Range Sensor	MQB	Under the vehicle, center, within T12 Automatic Transmission Assembly	*Automatic Transmission Components - Case (MQB)*	• *B303 Transmission Range Sensor (MQB)* • *B303 Transmission Range Sensor (MQE)*
B306A	Parking Assist Sensor - Front Left Outer	UD5	At the front of the vehicle, left side, mounted in the front bumper	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	*B306A Parking Assist Sensor - Front Left Outer (UD5)*
B306B	Parking Assist Sensor - Front Left Middle	UD5	At the front of the vehicle, left of center, mounted in the front bumper	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	*B306B Parking Assist Sensor - Front Left Middle (UD5)*
B306C	Parking Assist Sensor - Front Right Middle	UD5	At the front of the vehicle, right of center, mounted in the front bumper	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	*B306C Parking Assist Sensor - Front Right Middle (UD5)*
B306D	Parking Assist Sensor - Front Right Outer	UD5	At the front of the vehicle, right side, mounted in the front bumper	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	*B306D Parking Assist Sensor - Front Right Outer (UD5)*
B306E	Parking Assist Sensor - Rear Left Outer	UD5/UD7	At the rear of the vehicle, left side, mounted in the rear bumper	*Rear Bumper Components*	*B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)*
B306F	Parking Assist Sensor - Rear Left Middle	UD5/UD7	At the rear of the vehicle, left of center, mounted in the rear bumper	*Rear Bumper Components*	*B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)*
B306G	Parking Assist Sensor - Rear Right Middle	UD5/UD7	At the rear of the vehicle, right of middle, mounted in the rear bumper	*Rear Bumper Components*	*B306G Parking Assist Sensor - Rear Right Middle (UD5/ UD7)*
B306H	Parking Assist Sensor - Rear Right Outer	UD5/UD7	At the rear of the vehicle, right side, in the rear bumper	*Rear Bumper Components*	*B306H Parking Assist Sensor - Rear Right Outer (UD5/ UD7)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B310	Fuel Pressure/ Temperature Sensor	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, center, under intake manifold, at the front of the fuel rail • (L82/L84/L87/LV3) In the engine compartment, rear center, under intake manifold, at the rear of the driver side fuel rail	• Engine Components - Left Rear (L3B) • Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	• B310 Fuel Pressure/Temperature Sensor (L3B) • B310 Fuel Pressure/Temperature Sensor (LV3/L82/ L84/L87)
B321	Crankcase Pressure Sensor	LM2	In the engine compartment, rear center, mounted to the right rear side of the valve cover	Engine Components - Right Rear (LM2)	B321 Crankcase Pressure Sensor (LM2)
B338A	Intake Camshaft Profile Sleeve Position Sensor 1	L3B	In the engine compartment, center, mounted to camshaft carrier, left of M129A Intake Camshaft Profile Actuator 1	Engine Components - Left Front (L3B)	B338A Intake Camshaft Profile Sleeve Position Sensor 1 (L3B)
B338B	Intake Camshaft Profile Sleeve Position Sensor 2	L3B	In the engine compartment, center, mounted to camshaft carrier, left of M129D Intake Camshaft Profile Actuator 4	—	B338B Intake Camshaft Profile Sleeve Position Sensor 2 (L3B)
B339A	Exhaust Camshaft Profile Sleeve Position Sensor 1	L3B	In the engine compartment, center, mounted to the right side of the camshaft carrier	—	B339A Exhaust Camshaft Profile Sleeve Position Sensor 1 (L3B)
B339B	Exhaust Camshaft Profile Sleeve Position Sensor 2	L3B	In the engine compartment, center, mounted to the right side of the camshaft carrier	—	B339B Exhaust Camshaft Profile Sleeve Position Sensor 2 (L3B)
B34	Engine Coolant Temperature Sensor	LV3/L82/L84/ L87	In the engine compartment, front center, mounted to water pump	Engine Components - Right (LV3)	B34 Engine Coolant Temperature Sensor (LV3)
B342A	UHF Low Energy Remote Control Access Sensor Transceiver 1	BOP	In the engine compartment, left of center, near radiator core support	—	B342A UHF Low Energy Remote Control Access Sensor Transceiver 1 (BOP)
B342B	UHF Low Energy Remote Control Access Sensor Transceiver 2	BOP	At the rear of the vehicle, beneath rear of bed, near X88 Trailer Connector	—	B342B UHF Low Energy Remote Control Access Sensor Transceiver 2 (BOP)
B342C	UHF Low Energy Remote Control Access Sensor Transceiver 3	BOP	In the engine compartment, right of center, near radiator core support	—	B342C UHF Low Energy Remote Control Access Sensor Transceiver 3 (BOP)
B342D	UHF Low Energy Remote Control Access Sensor Transceiver 4	BOP	At the rear of the vehicle, beneath rear of bed, near X88 Trailer Connector	—	B342D UHF Low Energy Remote Control Access Sensor Transceiver 4 (BOP)
B345R	Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation	LM2	Mounted to the exhaust	Engine Components - Right Rear (LM2)	B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B34A	Engine Coolant Temperature Sensor 1	L3B/LM2	• (L3B) In the engine compartment, left side of engine block, attached to the front of Q97 Engine Coolant Flow Control Valve • (LM2) In the engine compartment, right front, mounted to water pump inlet pipe	*Engine Components - Left Front (L3B)*	• *B34A Engine Coolant Temperature Sensor 1 (L3B)* • *B34A Engine Coolant Temperature Sensor 1 (LM2)*
B34B	Engine Coolant Temperature Sensor 2	L3B/LM2	• (L3B) In the engine compartment, right front, attached to the coolant pipe above the G59 Engine Coolant Pump • (LM2) In the engine compartment, attached to the left front side of the engine block, beneath air cleaner outlet front duct	• *Engine Components - Left Rear (LM2)* • *Engine Components - Right Front (L3B)*	• *B34B Engine Coolant Temperature Sensor 2 (L3B)* • *B34B Engine Coolant Temperature Sensor 2 (LM2)*
B34C	Engine Coolant Temperature Sensor 3	L3B/LM2	In the engine compartment, right rear, mounted to heater core inlet hose	*Engine Components - Right Rear (L3B)*	• *B34C Engine Coolant Temperature Sensor 3 (L3B)* • *B34C Engine Coolant Temperature Sensor 3 (LM2)*
B34D	Engine Coolant Temperature Sensor 4	L3B/LM2	In the engine compartment, right rear, mounted to heater core outlet hose	—	• *B34D Engine Coolant Temperature Sensor 4 (L3B)* • *B34D Engine Coolant Temperature Sensor 4 (LM2)*
B34E	Engine Coolant Temperature Sensor 5	L3B/LM2	• (L3B) In the engine compartment, right side, mounted above exhaust manifold, to the right off the camshaft carrier • (LM2) In the engine compartment, left rear, mounted to engine block, rear of Q74 Engine Coolant Bypass Valve	• *Engine Components - Left Rear (LM2)* • *Engine Components - Right Front (L3B)*	• *B34E Engine Coolant Temperature Sensor 5 (L3B)* • *B34E Engine Coolant Temperature Sensor 5 (LM2)*
B34F	Engine Coolant Temperature Sensor 6	L3B	In the engine compartment, attached to the left side of the engine block, in front of Q97 Engine Coolant Flow Control Valve	*Engine Components - Left Rear (L3B)*	*B34F Engine Coolant Temperature Sensor 6 (L3B)*
B34J	Engine Coolant Temperature Sensor 7	LM2	In the engine compartment, right front, in front of turbo, mounted to charge air cooler coolant hose	—	*B34J Engine Coolant Temperature Sensor 7 (LM2)*
B35	Engine Oil Level Switch	L82/L84/L87/LV3	In the engine compartment, mounted to the right side of the engine oil pan	• *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	*B35 Engine Oil Level Switch (L82/L84/L87/LV3)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B352	Video Display Inside Rearview Mirror Camera	DRZ	Outside the vehicle, at the top center of the rear window bridge, within E6 Center High Mounted Stop Lamp	—	B352 Video Display Inside Rearview Mirror Camera (DRZ)
B36	Engine Oil Temperature Sensor	L3B/LM2	• (L3B) In the engine compartment, left side, mounted to the engine oil filter housing • (LM2) In the engine compartment, right rear, mounted to the right rear side of the lower crank case, forward of B37B Engine Oil Pressure Sensor	Engine Components - Right Front (L3B)	• B36 Engine Oil Temperature Sensor (L3B) • B36 Engine Oil Temperature Sensor (LM2)
B37B	Engine Oil Pressure Sensor	—	• (L3B) In the engine compartment, front center, mounted to the right side of the engine block, near the accessory belt drive • (L82/L84/L87) In the engine compartment, left side of engine, mounted above the engine oil filter • (LM2) In the engine compartment, right rear, mounted to the right rear side of the lower crank case, rear of B36 Engine Oil Temperature Sensor(LV3) In the engine compartment, front center, beneath Q38 Throttle Body	• Engine Components - Left (LV3) • Engine Components - Left Front (L82/L84/L87) • Engine Components - Right Front (L3B)	• B37B Engine Oil Pressure Sensor (L3B) • B37B Engine Oil Pressure Sensor (L82) • B37B Engine Oil Pressure Sensor (L84/L87) • B37B Engine Oil Pressure Sensor (LM2) • B37B Engine Oil Pressure Sensor (LV3)
B39	A/C Evaporator Temperature Sensor	—	In the passenger compartment, behind the instrument panel, mounted in the HVAC housing	—	B39 A/C Evaporator Temperature Sensor
B46	Fuel Level Sensor	—	Under the vehicle, inside the fuel tank, part of the fuel pump and level sensor assembly	—	—
B47	Fuel Pressure Sensor	—	Under the vehicle, left side, in front of rear axle, mounted to the top of the fuel tank	—	• B47 Fuel Pressure Sensor (L3B/L82/L84/L87/LV3) • B47 Fuel Pressure Sensor (LM2)
B47B	Fuel Rail Pressure Sensor	LM2	In the engine compartment, at the top of the engine, mounted to the fuel rail	—	B47B Fuel Rail Pressure Sensor (LM2)
B52A	Heated Oxygen Sensor 1	L3B	In the engine compartment, right rear, mounted in exhaust, behind turbocharger	Engine Components - Right Rear (L3B)	B52A Heated Oxygen Sensor 1 (L3B)
B52B	Heated Oxygen Sensor 2	L3B	In the engine compartment, right rear, mounted in catalytic converter	Engine Components - Right Rear (L3B)	B52B Heated Oxygen Sensor 2 (L3B)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B52C	Heated Oxygen Sensor - Bank 1 Sensor 1	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 1 exhaust, upstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	*B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/ L87/LV3)*
B52D	Heated Oxygen Sensor - Bank 1 Sensor 2	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 1 exhaust, downstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	*B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/ L87/LV3)*
B52E	Heated Oxygen Sensor - Bank 2 Sensor 1	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 2 exhaust, upstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	*B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/ L87/LV3)*
B52F	Heated Oxygen Sensor - Bank 2 Sensor 2	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 2 exhaust, downstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	*B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87/ LV3)*
B55	Engine Hood Switch	—	Outside the vehicle, at the front center of the hood, part of the hood latch assembly	*Engine Compartment Components - Top*	*B55 Engine Hood Switch*
B59L	Front Impact Sensor - Left	—	In the engine compartment, left front, at the bottom of the radiator core support	*Engine Compartment Components - Top*	*B59L Front Impact Sensor - Left*
B59R	Front Impact Sensor - Right	—	In the engine compartment, right front, at the bottom of the radiator core support	*Engine Compartment Components - Top*	*B59R Front Impact Sensor - Right*
B5LF	Wheel Speed Sensor - Left Front	—	Outside the vehicle, part of the left front wheel hub assembly	—	*B5LF Wheel Speed Sensor - Left Front*
B5LR	Wheel Speed Sensor - Left Rear	—	Outside the vehicle, mounted to the outboard end of the left axle tube	*Brake and Suspension Components*	*B5LR Wheel Speed Sensor - Left Rear*
B5RF	Wheel Speed Sensor - Right Front	—	Outside the vehicle, part of the right front wheel hub assembly	—	*B5RF Wheel Speed Sensor - Right Front*
B5RR	Wheel Speed Sensor - Right Rear	—	Outside the vehicle, mounted to the outboard end of the right axle tube	*Brake and Suspension Components*	*B5RR Wheel Speed Sensor - Right Rear*
B61P	Seat Belt Tension Sensor - Passenger	—	In the passenger compartment, at the base of the B-pillar, part of the passenger seat belt retractor pretensioner	*Passenger Compartment - Right Rear (Regular Cab)*	*B61P Seat Belt Tension Sensor - Passenger*
B63LF	Side Impact Sensor - Left Front	—	At the left front of the passenger compartment, mounted inside the left front door, at the bottom	*Driver Door Components*	*B63LF Side Impact Sensor - Left Front*
B63LR	Side Impact Sensor - Left Rear	Extended Cab/ Crew Cab	At the left rear of the passenger compartment, mounted inside the left rear door, at the bottom	*Right Rear Door Components (Extended Cab/Crew Cab)*	*B63LR Side Impact Sensor - Left Rear*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B63RF	Side Impact Sensor - Right Front	—	At the right front of the passenger compartment, mounted inside the right front door, at the bottom	*Passenger Door Components*	*B63RF Side Impact Sensor - Right Front*
B63RR	Side Impact Sensor - Right Rear	Extended Cab/ Crew Cab	At the right rear of the passenger compartment, mounted inside the right rear door, at the bottom	*Left Rear Door Components (Extended Cab/Crew Cab)*	*B63RR Side Impact Sensor - Right Rear*
B65	Intake Manifold Pressure and Air Temperature Sensor	LM2	In the engine compartment, left side of engine, mounted to the intake manifold, near Q18A Fuel Pressure Regulator 1	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)*	• *B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)* • *B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)*
B68A	Knock Sensor 1	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, left side of engine, mounted to the front of the engine block, below Q17A Fuel Injector 1 and Q17B Fuel Injector 2 • (L82/L84/L87) In the engine compartment, left side of engine, mounted to the rear of the engine block, below exhaust manifold	• *Engine Components - Left (LV3)* • *Engine Components - Left Front (L82/L84/L87)* • *Engine Components - Left Rear (L3B)*	• *B68A Knock Sensor 1 (L3B)* • *B68A Knock Sensor 1 (L82/L84/ L87/LV3)*
B68B	Knock Sensor 2	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, left side of engine, mounted to the front of the block, below Q17C Fuel Injector 3and Q17D Fuel Injector 4 • (L82/L84/L87) In the engine compartment, right rear, mounted to right rear side of engine block, behind M64 Starter Motor	• *Engine Components - Left Rear (L3B)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *B68B Knock Sensor 2 (L3B)* • *B68B Knock Sensor 2 (L82/L84/ L87/LV3)*
B74	Manifold Absolute Pressure Sensor	L82/L84/L87/ LV3	In the engine compartment, front center, mounted to intake manifold, to the left of Q38 Throttle Body	• *Engine Components - Left (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	*B74 Manifold Absolute Pressure Sensor (L82/L84/L87/LV3)*
B75C	Multifunction Intake Air Sensor	—	Left front of the engine compartment, mounted in the air cleaner assembly	• *Engine Components - Left (LV3)* • *Engine Components - Left Front (L82/L84/L87)*	*B75C Multifunction Intake Air Sensor*
B80	Park Brake Switch	—	In the passenger compartment, at the left lower side of the instrument panel	*Instrument Panel - Front*	*B80 Park Brake Switch*
B81B	Park Position Switch	—	In the passenger compartment, left front, inside of S3 Transmission Shift Lever	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B87	Rearview Camera	UVB/UVC/UV2/UVI	Outside the vehicle, at the top middle of the tailgate, mounted in the tailgate handle	• Endgate Components (QK2) • Endgate Components (QT6)	• B87 Rearview Camera (5N5) • B87 Rearview Camera (UVB) • B87 Rearview Camera (UVC) • B87 Rearview Camera (UVI/UVS)
B87CA	Rearview Driver Information Camera - Cargo Area	UVS	Outside of the vehicle, at the rear of the cab, back of roof, within E6 Center High Mounted Stop Lamp	—	B87CA Rearview Driver Information Camera - Cargo Area (UVN/UVS)
B88D	Seat Belt Switch - Driver	—	In the passenger compartment, at the inboard side of the driver seat, part of the seat belt buckle	Driver Seat Components	B88D Seat Belt Switch - Driver
B88P	Seat Belt Switch - Passenger	—	In the passenger compartment, at the inboard side of the passenger seat, part of the seat belt buckle	Passenger Seat Components	B88P Seat Belt Switch - Passenger
B9	Ambient Air Temperature Sensor	—	Outside of the vehicle, at the bottom of A9B Outside Rearview Mirror - Passenger	Passenger Door Components	B9 Ambient Air Temperature Sensor
B96	Cylinder Head Temperature Sensor	LM2	In the engine compartment, center, above the drive belt, near inline connector X160 Engine Harness to Fuel Injector Harness	—	B96 Cylinder Head Temperature Sensor (LM2)
C1	Battery	—	In the engine compartment, right rear, under X50D Fuse Block - Battery	—	—
E11A	Fuel Heater/Water in Fuel Sensor	LM2	Under the vehicle, mounted to the bracket above the spare tire	—	E11A Fuel Heater/Water in Fuel Sensor (LM2)
E12A	Glow Plug 1	LM2	In the engine compartment, In the cylinder head at cylinder 1	—	E12A Glow Plug 1 (LM2)
E12B	Glow Plug 2	LM2	In the engine compartment, In the cylinder head at cylinder 2	—	E12B Glow Plug 2 (LM2)
E12C	Glow Plug 3	LM2	In the engine compartment, In the cylinder head at cylinder 3	—	E12C Glow Plug 3 (LM2)
E12D	Glow Plug 4	LM2	In the engine compartment, In the cylinder head at cylinder 4	—	E12D Glow Plug 4 (LM2)
E12E	Glow Plug 5	LM2	In the engine compartment, In the cylinder head at cylinder 5	—	E12E Glow Plug 5 (LM2)
E12F	Glow Plug 6	LM2	In the engine compartment, In the cylinder head at cylinder 6	—	E12F Glow Plug 6 (LM2)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E13L	Headlamp - Left	—	At the front of the vehicle, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (Z88)* • *Headlamps - Mid Level (X88)* • *Headlamps - Up Level (X88)* • *Headlamps - Up Level (Z88)*	—
E13LA	Headlamp Assembly - Left	—	Outside the vehicle, at the left front corner	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	—
E13R	Headlamp - Right	—	At the front of vehicle, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (Z88)* • *Headlamps - Mid Level (X88)* • *Headlamps - Up Level (X88)* • *Headlamps - Up Level (Z88)*	—
E13RA	Headlamp Assembly - Right	—	Outside the vehicle, at the right front corner	• *Front of Vehicle Components (X88)* • *Front of Vehicle Components (Z88)*	—
E14A	Seat Heating Element - Driver Back	KA1	In the passenger compartment, in the driver seat back	—	*E14A Seat Heating Element - Driver Back (KA1)*
E14B	Seat Heating Element - Driver Cushion	KA1	In the passenger compartment, in the driver seat cushion	—	*E14B Seat Heating Element - Driver Cushion (KA1)*
E14C	Seat Heating Element - Passenger Back	KA1	In the passenger compartment, in the passenger seat back	—	*E14C Seat Heating Element - Passenger Back (KA1)*
E14D	Seat Heating Element - Passenger Cushion	KA1	In the passenger compartment, in the passenger seat cushion	—	*E14D Seat Heating Element - Passenger Cushion (KA1)*
E14F	Seat Heating Element - Left Rear Cushion	KA6	In the passenger compartment, in the left rear seat cushion	—	*E14F Seat Heating Element - Left Rear Cushion (KA6)*
E14H	Seat Heating Element - Right Rear Cushion	KA6	In the passenger compartment, in the right rear seat cushion	—	*E14H Seat Heating Element - Right Rear Cushion (KA6)*
E15	Steering Wheel Heater	KI3	In the passenger compartment, part of the steering wheel	—	—
E17D	Outside Rearview Mirror Glass - Driver	DEZ/DLF/UKC	Outside the vehicle, at the front of the driver door, part of A9A Outside Rearview Mirror - Driver	—	—
E17P	Outside Rearview Mirror Glass - Passenger	DEZ/DLF/UKC	Outside the vehicle, at the front of the passenger door, part of A9B Outside Rearview Mirror - Passenger	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E18	Rear Defogger Grid	—	At the rear of the passenger compartment, part of the rear window glass	• Passenger Compartment - Left Rear (Extended Cab/Crew Cab) • Passenger Compartment - Left Rear (Regular Cab) • Passenger Compartment - Right Rear (Extended Cab/Crew Cab) • Passenger Compartment - Right Rear (Regular Cab)	• E18 Rear Defogger Grid X1 • E18 Rear Defogger Grid X2
E28	Center Console Compartment Lamp	D07	In the passenger compartment, between the front seats, inside the floor console storage bin	Floor Console Components	E28 Center Console Compartment Lamp (D07)
E29LF	Fog Lamp - Left Front	S3U/T3U	Outside the vehicle, at the left front corner, in the front bumper, below E13LA Headlight Assembly - Left	• Front of Vehicle Components (X88) • Front of Vehicle Components (Z88)	• E29LF Fog Lamp - Left Front (S3U) • E29LF Fog Lamp - Left Front (T3U)
E29RF	Fog Lamp - Right Front	S3U/T3U	Outside the vehicle, at the right front corner, in the front bumper, below E13RA Headlamp Assembly - Right	• Front of Vehicle Components (X88) • Front of Vehicle Components (Z88)	• E29RF Fog Lamp - Right Front (S3U) • E29RF Fog Lamp - Right Front (T3U)
E2LF	Side Marker Lamp - Left Front	—	At the left front of vehicle, within E13LA Headlamp Assembly - Left	• Headlamps - Base Level (X88) • Headlamps - Base Level (Z88) • Headlamps - Mid Level (X88) • Headlamps - Up Level (X88) • Headlamps - Up Level (Z88)	E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)
E2LM	Side Marker Lamp - Left Middle	DPO/DQS	Outside of the vehicle, left side, within A9A Outside Rearview Mirror - Driver	—	—
E2LR	Side Marker Lamp - Left Rear	—	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Base Level (Z88) • Tail Lamp Assemblies - Up Level (X88) • Tail Lamp Assemblies - Up Level (Z88)	E2LR Side Marker Lamp - Left Rear (GF3/GF5)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E2RF	Side Marker Lamp - Right Front	—	At the right front of vehicle, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (X88)* • *Headlamps - Base Level (Z88)* • *Headlamps - Mid Level (X88)* • *Headlamps - Up Level (X88)* • *Headlamps - Up Level (Z88)*	*E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)*
E2RM	Side Marker Lamp - Right Middle	DPO/DQS	Outside of the vehicle, right side, within A9B Outside Rearview Mirror - Passenger	—	—
E2RR	Side Marker Lamp - Right Rear	—	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	• *Tail Lamp Assemblies - Base Level (X88)* • *Tail Lamp Assemblies - Base Level (Z88)* • *Tail Lamp Assemblies - Up Level (X88)* • *Tail Lamp Assemblies - Up Level (Z88)*	*E2RR Side Marker Lamp - Right Rear (GF3/GF5)*
E31L	Sunshade Mirror Lamp - Left	DH6	In the passenger compartment, at the left front of the headliner, part of A3L Sunshade - Left	—	*E31L Sunshade Mirror Lamp - Left*
E31R	Sunshade Mirror Lamp - Right	DH6	In the passenger compartment, at the right front of the headliner, part of A3R Sunshade - Right	—	*E31R Sunshade Mirror Lamp - Right*
E33L	Cargo Lamp - Left	—	Outside the vehicle, beneath the top of the left side of the bed	—	*E33L Cargo Lamp - Left (UF2)*
E33R	Cargo Lamp - Right	—	Outside the vehicle, beneath the top of the right side of the bed	—	*E33R Cargo Lamp - Right (UF2)*
E35L	Exterior Spot Lamp - Left	—	Outside of the vehicle, left side, mounted to left A-pillar	—	*E35L Exterior Spot Lamp - Left (7X2/7X3/7X6/7X7)*
E35R	Exterior Spot Lamp - Right	—	Outside of the vehicle, right side, mounted to right A-pillar	—	*E35R Exterior Spot Lamp - Right (7X2/7X3/7X6/7X7)*
E37B	Dome/Reading Lamps - 2nd Row	Extended Cab/ Crew Cab	In the passenger compartment, near the center of the headliner	*Headliner Components*	*E37B Dome/Reading Lamps - 2nd Row X1 (EXTENDED CAB/ CREW CAB)*
E40	Electrical Auxiliary Heater	C32	In the passenger compartment, at the top of the HVAC box	—	• *E40 Electrical Auxiliary Heater X1 (C32)* • *E40 Electrical Auxiliary Heater X2 (C32)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E42L	Tail Lamp Assembly - Left	—	Outside the vehicle, at the left rear corner of the vehicle	*Rear of Vehicle Components*	• *E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)* • *E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)* • *E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)*
E42R	Tail Lamp Assembly - Right	—	Outside the vehicle, at the right rear corner of the vehicle	*Rear of Vehicle Components*	• *E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)* • *E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)* • *E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)*
E4C	Daytime Running Lamp - Left	—	At the front of vehicle, left front corner, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (Z88)* • *Headlamps - Mid Level (X88)* • *Headlamps - Up Level (X88)* • *Headlamps - Up Level (Z88)*	—
E4D	Daytime Running Lamp - Right	—	At the front of vehicle, right front corner, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (Z88)* • *Headlamps - Mid Level (X88)* • *Headlamps - Up Level (X88)* • *Headlamps - Up Level (Z88)*	—
E4E	Headlamp - Left High Beam	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	*Headlamps - Base Level (X88)*	*E4E Headlamp - Left High Beam (GF2/GF5/GPZ)*
E4F	Headlamp - Right High Beam	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	*Headlamps - Base Level (X88)*	*E4F Headlamp - Right High Beam (GF2/GF5/GPZ)*
E4G	Headlamp - Left Low Beam	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	*Headlamps - Base Level (X88)*	*E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)*
E4H	Headlamp - Right Low Beam	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	*Headlamps - Base Level (X88)*	*E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)*
E4LF	Turn Signal Lamp - Left Front	—	At the front of vehicle, left front corner, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (Z88)* • *Headlamps - Mid Level (X88)* • *Headlamps - Up Level (X88)* • *Headlamps - Up Level (Z88)*	*E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)*
E4N	Park/Turn Signal Lamp - Left	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	*Headlamps - Base Level (X88)*	*E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E4P	Park/Turn Signal Lamp - Right	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	Headlamps - Base Level (X88)	E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)
E4RF	Turn Signal Lamp - Right Front	—	At the front of vehicle, right front corner, within E13RA Headlamp Assembly - Right	• Headlamps - Base Level (Z88) • Headlamps - Mid Level (X88) • Headlamps - Up Level (X88) • Headlamps - Up Level (Z88)	E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)
E4Y	Turn Signal Repeater Lamp - Left	—	Outside of vehicle, left side, within A9A Outside Rearview Mirror - Driver	—	—
E4Z	Turn Signal Repeater Lamp - Right	—	Outside of vehicle, right side, within A9B Outside Rearview Mirror - Passenger	—	—
E52	Reductant Line Heater	LM2	Under the vehicle, right side, forward of rear axle, attached to reductant line, near reductant tank	—	E52 Reductant Line Heater (LM2)
E53	Reductant Tank Heater	LM2	Under the vehicle, right side, forward of rear axle, within reductant tank, part of A38 Reductant Pump and Sensor Assembly	—	—
E5A	Backup Lamp - Left	—	At the rear of vehicle, left rear corner, within E42L Tail lamp Assembly - Left	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Base Level (Z88) • Tail Lamp Assemblies - Up Level (X88) • Tail Lamp Assemblies - Up Level (Z88)	E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)
E5AG	Tail/Stop and Turn Signal Lamp - Left Upper	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Up Level (X88)	—
E5AH	Tail/Stop and Turn Signal Lamp - Right Upper	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Up Level (X88)	—
E5AM	Stop/Turn Signal Lamp - Left	—	At the rear of vehicle, left rear corner, within E42L Tail lamp Assembly - Left	• Tail Lamp Assemblies - Base Level (Z88) • Tail Lamp Assemblies - Up Level (Z88)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E5AN	Stop/Turn Signal Lamp - Right	—	At the rear of vehicle, right rear corner, within E42R Tail lamp Assembly - Right	• Tail Lamp Assemblies - Base Level (Z88) • Tail Lamp Assemblies - Up Level (Z88)	—
E5AU	Stop/Turn Signal Lamp - Right Upper	X88+Up Level	At the rear of the vehicle, right rear, within E42R Tail Lamp Assembly - Right	—	—
E5B	Backup Lamp - Right	—	At the rear of vehicle, right rear corner, within E42R Tail lamp Assembly - Right	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Base Level (Z88) • Tail Lamp Assemblies - Up Level (X88) • Tail Lamp Assemblies - Up Level (Z88)	E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)
E5E	Tail Lamp - Left	—	At the rear of vehicle, left rear corner, within E42L Tail lamp Assembly - Left	Tail Lamp Assemblies - Base Level (Z88)	—
E5F	Tail Lamp - Right	—	At the rear of vehicle, right rear corner, within E42R Tail lamp Assembly - Right	Tail Lamp Assemblies - Base Level (Z88)	—
E5S	Tail/Stop and Turn Signal Lamp - Left	ZW9/Up	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	—	—
E5T	Tail/Stop and Turn Signal Lamp - Right	ZW9/Up	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	—	—
E5U	Tail/Stop and Turn Signal Lamp - Left Lower	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Up Level (X88)	—
E5V	Tail/Stop and Turn Signal Lamp - Right Lower	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	• Tail Lamp Assemblies - Base Level (X88) • Tail Lamp Assemblies - Up Level (X88)	—
E6	Center High Mounted Stop Lamp	—	Outside the vehicle, at the top center of the rear window bridge	Rear of Vehicle Components	• E6 Center High Mounted Stop Lamp (EXTENDED CAB/CREW CAB) • E6 Center High Mounted Stop Lamp (REGULAR CAB)
E63D	Flood Lamp - Driver Door Handle	—	In the passenger compartment, in the driver door handle trim panel	Driver Door Trim Components	E63D Flood Lamp - Driver Door Handle (AU3)
E63P	Flood Lamp - Passenger Door Handle	—	In the passenger compartment, in the passenger door handle trim panel	Passenger Door Trim Components	E63P Flood Lamp - Passenger Door Handle (AU3)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E7	License Plate Lamp	ZW9	At the rear of the vehicle, mounted in the middle of the rear bumper	—	E7 License Plate Lamp (ZW9)
E70D	Outside Rearview Mirror Cargo Lamp - Driver	DPO/DQS	Outside of the vehicle, left side, within A9A Outside Rearvew Mirror - Driver	—	—
E70P	Outside Rearview Mirror Cargo Lamp - Passenger	DPO/DQS	Outside of the vehicle, right side, within A9B Outside Rearvew Mirror - Passenger	—	—
E7L	License Plate Lamp - Left	E63	Outside the vehicle, mounted in the middle of the rear bumper	Rear Bumper Components	E7L License Plate Lamp - Left (E63)
E7R	License Plate Lamp - Right	E63	Outside the vehicle, mounted in the middle of the rear bumper	Rear Bumper Components	E7R License Plate Lamp - Right (E63)
E8L	Liftgate Courtesy Lamp	QT5/QT6	At the rear of the vehicle, within endgate, above liftgate handle	• Endgate Components (QK2) • Endgate Components (QT6)	E8L Liftgate Courtesy Lamp (QT5/QT6)
E90DF	Exterior Flood Lamp - Driver Outside Rearview Mirror Forward	DEZ/DLF	Outside of the vehicle, at the front of A9A Outside Rearview Mirror - Driver	Driver Door Components	—
E90DL	Exterior Flood Lamp - Driver Outside Rearview Mirror Lower	DEZ	Outside of the vehicle, at the bottom of A9A Outside Rearview Mirror - Driver	Driver Door Components	—
E90PF	Exterior Flood Lamp - Passenger Outside Rearview Mirror Forward	DEZ/DLF	Outside of the vehicle, at the front of A9B Outside Rearview Mirror - Passenger	Passenger Door Components	—
E90PL	Exterior Flood Lamp - Passenger Outside Rearview Mirror Lower	DEZ	Outside of the vehicle, at the bottom of A9B Outside Rearview Mirror - Passenger	Passenger Door Components	—
F101	Passenger Instrument Panel Air Bag	—	In the passenger compartment, behind the instrument panel upper glove box	—	• F101 Passenger Instrument Panel Air Bag X1 • F101 Passenger Instrument Panel Air Bag X2
F105L	Roof Rail Air Bag - Left	—	In the passenger compartment, along the left side of the headliner	• Passenger Compartment - Left Front (Extended Cab/Crew Cab) • Passenger Compartment - Left Rear (Regular Cab)	F105L Roof Rail Air Bag - Left
F105R	Roof Rail Air Bag - Right	—	In the passenger compartment, along the right side of the headliner	Passenger Compartment - Right Rear (Regular Cab)	F105R Roof Rail Air Bag - Right
F106D	Seat Side Air Bag - Driver	—	In the passenger compartment, in the outboard side of the driver seat back	Driver Seat Components	F106D Seat Side Air Bag - Driver
F106P	Seat Side Air Bag - Passenger	—	In the passenger compartment, in the outboard side of the passenger seat back	Passenger Seat Components	F106P Seat Side Air Bag - Passenger

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
F107	Steering Wheel Air Bag	—	In the passenger compartment, mounted to the middle of the steering wheel	—	- *F107 Steering Wheel Air Bag X1* - *F107 Steering Wheel Air Bag X2*
F112D	Seat Belt Retractor Pretensioner - Driver	—	In the passenger compartment, at the base of the driver side B-pillar	- *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* - *Passenger Compartment - Left Rear (Regular Cab)*	*F112D Seat Belt Retractor Pretensioner - Driver*
F112P	Seat Belt Retractor Pretensioner - Passenger	—	In the passenger compartment, at the base of the passenger side B-pillar	*Passenger Compartment - Right Rear (Regular Cab)*	- *F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab)* - *F112P Seat Belt Retractor Pretensioner - Passenger (Extended Cab)* - *F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)*
F113D	Seat Belt Anchor Pretensioner - Driver	—	In the passenger compartment, mounted to the outboard driver seat track	- *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* - *Passenger Compartment - Left Rear (Regular Cab)*	*F113D Seat Belt Anchor Pretensioner - Driver*
F113P	Seat Belt Anchor Pretensioner - Passenger	—	In the passenger compartment, mounted to the outboard passenger seat track	*Passenger Compartment - Right Rear (Regular Cab)*	*F113P Seat Belt Anchor Pretensioner - Passenger*
G1	A/C Compressor	—	- (LM2) In the engine compartment, left front, mounted to the left lower side of the engine -	- *Engine Components - Left Rear (LM2)* - *Engine Components - Right (LV3)* - *Engine Components - Right Front (L82/L84/L87)*	—
G10L	Cooling Fan Motor - Left	—	In the engine compartment, in the radiator shroud, left side	- *Radiator Support Components (LM2)* - *Radiator Support Components (LV3)*	- *G10L Cooling Fan Motor - Left (L3B)* - *G10L Cooling Fan Motor - Left (L82)* - *G10L Cooling Fan Motor - Left (L84/L87)* - *G10L Cooling Fan Motor - Left (LM2)* - *G10L Cooling Fan Motor - Left (LV3)*
G10LW	Cooling Fan Motor - Lower	LM2/L3B	In the engine compartment, in the radiator shroud, beneath the left and right cooling fan motors	*Radiator Support Components (LM2)*	- *G10LW Cooling Fan Motor - Lower (L3B)* - *G10LW Cooling Fan Motor - Lower (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G10R	Cooling Fan Motor - Right	—	In the engine compartment, in the radiator shroud, right side	• Radiator Support Components (LM2) • Radiator Support Components (LV3)	• G10R Cooling Fan Motor - Right (L3B) • G10R Cooling Fan Motor - Right (L82) • G10R Cooling Fan Motor - Right (L84/L87) • G10R Cooling Fan Motor - Right (LM2) • G10R Cooling Fan Motor - Right (LV3)
G110	Body Harness	—	In the engine compartment, left side, attached to body	G110, G114, G120, and G128	—
G114	Body Harness	—	In the engine compartment, left side, attached to body	G110, G114, G120, and G128	—
G115	Engine Harness	—	• (L3B) In the engine compartment, right front, attached to right front side of engine block, in front of turbocharger • (LM2) In the engine compartment, right rear, attached to the right rear side of the engine block, above the engine oil filter housing	• G115 and G121 (L3B) • G115, G117, and G118 (LM2)	—
G116	Power Steering Harness	—	In the engine compartment, right side, at right front strut tower	G116	—
G117	Engine Harness	—	• (L3B) In the engine compartment, rear center, attached to the back of the right side of the cylinder head • (L82/L84/L87/LV3) In the engine compartment, attached to the left side of the engine block, below the exhaust manifold • (LM2) In the engine compartment, right rear, attached to the right rear side of the engine block, above engine oil filter housing	• G115, G117, and G118 (LM2) • G117 (L3B) • G117 (L82/L84/L87) • G117 (LM2) • G117, G121, and G122 (LV3)	—
G118	Engine Harness	LM2	In the engine compartment, left rear, attached to left rear side of engine block, near bellhousing	• G115, G117, and G118 (LM2) • G118 (LM2)	—
G12	Fuel Pump	—	Under the vehicle, within the fuel tank, part of A7 Fuel Pump and Level Sender Assembly	—	—
G120	Body Harness	—	In the engine compartment, right side, right of C1 Battery	G110, G114, G120, and G128	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G121	Engine Harness	—	• (L3B) In the engine compartment, right front, attached to right front side of engine block, in front of turbocharger • (L82/L84/L87/LV3) In the engine compartment, left rear, attached to the rear of the left cylinder head	• G115 and G121 (L3B) • G117, G121, and G122 (LV3) • G121 and G122 (L82/L84/L87)	—
G122	Engine Harness	—	(L82/L84/L87/LV3) In the engine compartment, right rear, attached to right rear cylinder head	• G117, G121, and G122 (LV3) • G121 and G122 (L82/L84/L87)	—
G128	Body Harness	—	In the engine compartment, right rear, attached to bulkhead, near grommet for body harness	G110, G114, G120, and G128	—
G13	Generator	—	• (LM2) In the engine compartment, left front, mounted to the left upper side of the engine •	• Engine Components - Left Front (L3B) • Engine Components - Left Rear (LM2) • Engine Components - Right (LV3)	• G13 Generator X1 (L3B) • G13 Generator X1 (L82) • G13 Generator X1 (L84/L87) • G13 Generator X1 (LM2) • G13 Generator X1 (LV3) • G13 Generator X1 (VYU) • G13 Generator X2
G130	Negative Battery Cable Harness	—	In the engine compartment, right rear corner	—	—
G131	Frame Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of upper control arm	G131, G132, G133, and G134	—
G132	Engine Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of lower control arm	G131, G132, G133, and G134	—
G133	Frame Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of upper control arm	G131, G132, G133, and G134	—
G134	Engine Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of lower control arm	G131, G132, G133, and G134	—
G17	Heater Coolant Pump	L84/L87/LM2	In the engine compartment, front center, mounted to the right front side of the engine	Engine Components - Right Front (L82/L84/L87)	• G17 Heater Coolant Pump (L84/L87) • G17 Heater Coolant Pump (LM2)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G18	High Pressure Fuel Pump	—	(L3B) In the engine compartment, rear center, mounted on top of the rear of the camshaft carrier (L82/L84/L87/LV3) In the engine compartment, rear center, beneath the rear of the intake manifold (LM2) In the engine compartment, left rear, mounted near the left side of the transmission bellhousing	Engine Components - Left Rear (LM2) Engine Components - Right Front (L3B) Engine Components - Top (L82/ L84/L87) Engine Components - Top (LV3)	G18 High Pressure Fuel Pump (L3B) G18 High Pressure Fuel Pump (L82/L84/L87/ LV3)
G200	Instrument Panel Harness	—	In the passenger compartment, left front, below A-pillar, behind driver side kick panel	G200	—
G215	Electrical Auxiliary Heater Jumper Harness	—	In the passenger compartment, right front, within the instrument panel	—	—
G220	Instrument Panel Harness	—	In the passenger compartment, right front, below A-pillar, behind passenger side kick panel	G220	—
G24	Windshield Washer Pump	—	In the engine compartment, attached to the washer fluid reservoir, behind E13LA Headlamp Assembly - Left	Engine Compartment Components - Top	G24 Windshield Washer Pump
G300	Body Harness	—	In the passenger compartment, left side, at the bottom of the B-pillar	G300 and G308	—
G308	Body Harness	—	In the passenger compartment, left side, beneath the driver seat	G300 and G308	—
G312	Body Harness	—	In the passenger compartment, right side, beneath the passenger seat	G312 and G320	—
G320	Body Harness	—	In the passenger compartment, right side, at the bottom of the B-pillar	G312 and G320	—
G322	Chassis Harness	—	Under the vehicle, right side, within chassis harness, below passenger door, attached to frame near body mount	—	—
G33	Reductant Pump	LM2	Under the vehicle, right side, forward of rear axle, within reductant tank, part of A38 Reductant Pump and Sensor Assembly	—	—
G400	Chassis Harness	—	Under the rear of the vehicle, in front of the tow hitch, mounted to the right side of the frame	G322, G400, G405, and G415	—
G405	Chassis Harness	—	Under the rear of the vehicle, in front of the tow hitch, mounted to the center of the frame	G322, G400, G405, and G415	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G415	Chassis Harness	—	Under the rear of the vehicle, in front of the tow hitch, mounted to the left side of the frame	G322, G400, G405, and G415	—
G420	Chassis Harness	—	At the rear of the vehicle, right side, in the rear bumper	—	—
G5	Transmission Fluid Pump - Electric/ Auxiliary	MQB	Under the vehicle, within T12 Automatic Transmission Assembly	Automatic Transmission Components - Valve Body (MQB)	G5 Transmission Fluid Pump - Electric/ Auxiliary (MQB)
G58	Evaporative Emission Purge Pump	L3B	In the engine compartment, center, mounted above the intake manifold, to the left of the camshaft carrier	Engine Components - Left Front (L3B)	G58 Evaporative Emission Purge Pump (L3B)
G59	Engine Coolant Pump	L3B	In the engine compartment, right front, beneath turbocharger	Engine Components - Right Front (L3B)	G59 Engine Coolant Pump (L3B)
J100	Front Bumper Harness	UD5	Front of vehicle, left of center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle	Front of Vehicle - Front Bumper Harness	—
J101	Front Bumper Harness	UD5	Front of vehicle, center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle	Front of Vehicle - Front Bumper Harness	—
J102	Front Bumper Harness	T3U	Front of vehicle, right of center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle	Front of Vehicle - Front Bumper Harness	—
J103	Active Grille Air Shutter Jumper 1 Harness	—	At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 1 Harness	—	—
J104	Active Grille Air Shutter Jumper 2 Harness	—	At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 2 Harness	—	—
J105	Active Grille Air Shutter Jumper 1 Harness	—	At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 1 Harness	—	—
J106	Exterior Spot Lamp Harness	7X2/7X3/7X6/ 7X7	In the engine compartment, in exterior spot lamp harness, between X50D Fuse Block Battery and Left and Right Spot Lamp Fuse Holders	—	—
J107	Fog Lamp Accessory Harness	S3U	In the engine compartment, right front, behind E13RA Headlamp Assembly - Right, within Fog Lamp Accessory Harness	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J110	Left Headlamp Assembly Harness	—	Outside of the vehicle, left front corner, within E13LA Headlamp Assembly - Left	—	—
J111	Left Headlamp Harness	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	—	—
J112	Left Headlamp Harness	(X88-Base)/ (Z88)	At the left front of vehicle, within E13LA Headlamp Assembly - Left	—	—
J120	Right Headlamp Assembly Harness	—	Outside of the vehicle, right front corner, within E13RA Headlamp Assembly - Right	—	—
J121	Right Headlamp Harness	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	—	—
J122	Right Headlamp Harness	(X88-Base)/ (Z88)	At the right front of vehicle, within E13RA Headlamp Assembly - Right	—	—
J130	Body Harness	—	In the engine compartment, left front, in breakout to B118B Windshield Washer Fluid Level Switch and G24 Windshield Washer Pump	—	—
J131	Body Harness	—	In front of the windshield, left side, under the air inlet grille panel, in breakout to M75 Windshield Wiper Motor	—	—
J132	Body Harness	—	In the engine compartment, left rear, approximately 10 cm (3.9 in) from breakout to K160 Brake System Control Module, towards the rear of the vehicle	—	—
J133	Body Harness	—	In the engine compartment, right front, approximately 5 cm (2 in) from breakout towards B59R Front Impact Sensor - Right, towards the breakout to X50A Fuse Block - Underhood	—	—
J134	Body Harness	Regular Cab	In the engine compartment, right side, approximately 14 cm (5.5 in) from breakout to X50A Fuse Block - Underhood, towards the rear of the vehicle	—	—
J140	Snow Plow Jumper Harness	VYU	In the engine compartment, in the snow plow jumper harness between the breakout to X54 Fuse Block - Snow Plow and breakout to G13E Generator - Auxiliary	—	—
J141	Snow Plow Jumper Harness	VYU	In the engine compartment, in the snow plow jumper harness between the breakout to X54 Fuse Block - Snow Plow and breakout to X55SP Fuse Holder - Snow Plow	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J147	Engine Harness	LM2	In the engine compartment, front center, in cable channel, less than 13 cm (5.1 in) from breakout to inline connector X172	—	—
J148	Engine Harness	LM2	In the engine compartment, front center, in cable channel, approximately 5 cm (2 in) from breakout towards Q22 Intake Manifold Tuning Solenoid Valve, B47B Fuel Rail Pressure Sensor, and B193A Charge Air Cooler Inlet Temperature Sensor	• *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—
J149	Body Harness	—	In the engine compartment, left side, between breakouts to ground G114 and ground G110	—	—
J150	Engine Harness	—	• (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout to Q38 Throttle Body • (L82/L84/L87) In the engine compartment, approximately 5 cm (2 in) from breakout to B74 Manifold absolute Pressure Sensor • (LM2) In the engine compartment, left side, approximately 5 cm (2 in) from breakout to K69 Transfer Case Control Module, within cable channel • (LV3) In engine compartment, left front, approximately 11 cm (4.3 in) from breakout to K20 Engine Control Module	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Left Rear (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J151	Engine Harness	—	• (L3B) In the engine compartment, approximately 22 cm (8.7 in) from breakout to B75C Multifunction Intake Air Sensor • (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to inline connector X155 • (LM2) In the engine compartment, left side, approximately 11 cm (4.3 in) from breakout to K69 Transfer Case Control Module, within cable channel • (LV3) In engine compartment, left front, in section of harness between K20 Engine Control Module and B75C Multifunction Intake Air Sensor	• Engine Compartment - Engine Harness - Left (LV3) • Engine Compartment - Engine Harness - Left Front (L3B) • Engine Compartment - Engine Harness - Left Front (L82) • Engine Compartment - Engine Harness - Left Front (LM2) • Engine Compartment - Engine Harness - Left Rear (LM2)	—
J152	Engine Harness	—	• (L3B) In the engine compartment, approximately 7 cm (2.8 in) from breakout towards ignition coils and camshaft sensors/actuators • (L82/L84/L87) In the engine compartment, middle rear, in harness channel on the back of the intake manifold • (LM2) In the engine compartment, left side, approximately 11 cm (4.3 in) from breakout to K69 Transfer Case Control Module, within cable channel • (LV3) In engine compartment, left front, in section of harness between K20 Engine Control Module and B75C Multifunction Intake Air Sensor	• Engine Compartment - Engine Harness - Left (LV3) • Engine Compartment - Engine Harness - Left Front (L3B) • Engine Compartment - Engine Harness - Left Rear (LM2) • Engine Compartment - Engine Harness - Right Rear (L82) • Engine Compartment - Engine Harness - Right Rear (L84/L87)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J153	Engine Harness	—	• (L3B) In the engine compartment, approximately 21 cm (8.3 in) from breakout to K69 Transfer Case Control Module • (L82) In the engine compartment, left front, approximately 3 cm (1.2 in) from breakout towards inline connector X171 • (L84/L87) In the engine compartment, left front, approximately 4 cm (1.6 in) from breakout to inline connector X155 • (LM2) In the engine compartment, left side, approximately 10 cm (3.9 in) from breakout to B1 A/C Refrigerant Pressure Sensor • (LV3) In engine compartment, left front, near breakout to K69 Transfer Case Control Module	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—
J154	Engine Harness	—	• (L3B) In the engine compartment, approximately 15 cm (5.9 in) from breakout to B75C Multifunction Intake Air Sensor • (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to inline connector X155 • (LM2) In the engine compartment, front center, in cable channel, approximately 13 cm (5.1 in) from breakout to inline connector X172 • (LV3) In engine compartment, left front, between breakout to B75C Multifunction Intake Air Sensor and breakout to K69 Transfer Case Control Module	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J155	Engine Harness	—	• (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout to inline connect X154 Engine Harness to Camshaft Position Sensor Jumper Harness • (L82/L84/L87) In the engine compartment, approximately 19 cm (7.5 in) from breakout to B74 Manifold Absolute Pressure Sensor • (LM2) In the engine compartment, left rear, approximately 10 cm (3.9 in) from breakout to Q18B Fuel Pressure Regulator, towards the front of the vehicle • (LV3) In engine compartment, center front, approximately 4 cm (1.6 in) from breakout to G1 A/C Compressor •	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Left Rear (LM2)* • *Engine Compartment - Engine Harness - Right Rear (L3B)*	—
J156	Engine Harness	—	• (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout to ground G117 • (LM2) In the engine compartment, left side, approximately 5 cm (2 in) from breakout to inline connector X172 • (LV3) In engine compartment, center front, between breakout to Q38 Throttle Body and breakout to T8A Ignition Coil 1	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Left Rear (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J157	Engine Harness	—	• (L3B) In the engine compartment, approximately 14 cm (5.5 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 18 cm (7.1 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness • (LM2) In the engine compartment, approximately 18 cm (7.1 in) from breakout to K69 Transfer Case Control Module • (LV3) In the engine compartment, left side, top of engine, between breakout to T8A ignition Coil 1 and breakout to T8C Ignition Coil 3	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Left Rear (LM2)*	—
J158	Engine Harness	L82/L84/L87/ LV3	• (L3B) In the engine compartment, approximately 4 cm (1.6 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 10 cm (3.9 in) from breakout to ground G121 • (LV3) In the engine compartment, left side, top of engine, between breakout to T8C Ignition Coil 3 and breakout to T8E Ignition Coil 5	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Right Rear (L82)* • *Engine Compartment - Engine Harness - Right Rear (L84/L87)*	—
J159	Engine Harness	L82/L84/L87/ LV3	• (L82/L84/L87) In the engine compartment, middle rear, in harness channel on the back of the intake manifold • (LV3) In the engine compartment, rear center, behind intake manifold, approximately 14 cm (5.5 in) from breakout to ground G121	• *Engine Compartment - Engine Harness - Rear (LV3)* • *Engine Compartment - Engine Harness - Right Rear (L82)* • *Engine Compartment - Engine Harness - Right Rear (L84/L87)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J160	Engine Harness	L82/L84/L87/LV3	• (LV3) In the engine compartment, right rear, between breakout to ground G122 and breakout to T8D Ignition Coil 4 • (L82/L84/L87) In the engine compartment, middle rear, approximately 14 cm (5.5 in) from breakout within the harness channel on the back of the intake manifold •	• Engine Compartment - Engine Harness - Rear (LV3) • Engine Compartment - Engine Harness - Right Rear (L82) • Engine Compartment - Engine Harness - Right Rear (L84/L87)	—
J161	Engine Harness	L3B/L82/L84/L87/LV3	• (L3B) In the engine compartment, approximately 11 cm (4.3 in) from breakout towards ignition coils and camshaft sensors/actuators • (L82/L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body • (LV3) In the engine compartment, right rear, in breakout to Ground G121 on rear of bank 2 cylinder head	• Engine Compartment - Engine Harness - Left Front (L82) • Engine Compartment - Engine Harness - Rear (LV3)	—
J162	Engine Harness	L3B/L82/L84/L87/LV3	• (L3B) In the engine compartment, right front, approximately 4 cm (1.6 in) from breakout to X50D Fuse Block - Battery • (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout toward G1 A/C Compressor • (LV3) In the engine compartment, rear middle, approximately 5 cm (2 in) from breakout to inline connector X160	• Engine Compartment - Engine Harness - Rear (LV3) • Engine Compartment - Engine Harness - Right Rear (L82) • Engine Compartment - Engine Harness - Right Rear (L84/L87)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J163	Engine Harness	—	• (L3B) In the engine compartment, approximately 13 cm (5.1 in) from breakout to K69 Transfer Case Control Module • (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout toward G1 A/C Compressor • (LM2) In the engine compartment, left side, approximately 5 cm (2 in) from breakout to inline connector X172 • (LV3) Under vehicle, left side of transmission, behind breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52D Heated Oxygen Sensor Bank 1 Sensor 2	• *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Left Rear (LM2)* • *Engine Compartment - Engine Harness - Rear (LV3)* • *Engine Compartment - Engine Harness - Right Front (LM2)* • *Engine Compartment - Engine Harness - Right Rear (L82)* • *Engine Compartment - Engine Harness - Right Rear (L84/L87)*	—
J164	Engine Harness	MYC	• (L82) In the engine compartment, left front, approximately 18 cm (7.1 in) from breakout to inline connector X156 • (LV3) Under vehicle, above rear of transmission, left of breakout to B52F Heated Oxygen Sensor - Bank 2 Sensor 2	• *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Rear (LV3)*	—
J165	Engine Harness	—	• (L3B) In the engine compartment, right front, approximately 3 cm (1.2 in) from breakout to B34B Engine Coolant Temperature Sensor 2 • (L82/L84/L87) In the engine compartment, approximately 5 cm (2 in) from breakout towards ground G117 • (LM2) In the engine compartment, left rear, approximately 3 cm (1.2 in) from breakout to M106 Exhaust Flow Control Valve Actuator • (LV3) Under vehicle, above rear of transmission, left of breakout to B52F Heated Oxygen Sensor - Bank 2 Sensor 2	• *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Rear (LV3)* • *Engine Compartment - Engine Harness - Right Rear (L3B)* • *Engine Compartment - Engine Harness - Right Rear (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J166	Engine Harness	—	• (L3B) In the engine compartment, approximately 7 cm (2.8 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, in breakout to B68A Knock Sensor 1 and B37B Engine Oil Pressure Sensor • (LM2) In the engine compartment, left side, approximately 4 cm (1.6 in) from breakout to K69 Transfer Case Control Module, within cable channel • (LV3) In the engine compartment, left front, approximately 7 cm (2.8 in) from breakout to T10L Cooling Fan Motor - Left	• Engine Compartment - Engine Harness - Left (LV3) • Engine Compartment - Engine Harness - Left Front (L82) • Engine Compartment - Engine Harness - Left Front (LM2) • Engine Compartment - Engine Harness - Left Rear (LM2)	—
J167	Engine Harness	MQE	• (L3B) In the engine compartment, approximately 57 cm (22.4 in) from breakout to B26 Crankshaft Position Sensor • (L84) In the engine compartment, approximately 9 cm (3.5 in) from breakout to K71 Transmission Control Module	Engine Compartment - Engine Harness - Left Front (L3B)	—
J168	Transmission Case Harness	MQE	Under the vehicle, within T12 Automatic Transmission Assembly	—	—
J169	Engine Harness	L3B	In the engine compartment, right front, approximately 4 cm (1.6 in) from breakout to G10R Cooling Fan Motor - Right, towards right side of vehicle	Engine Compartment - Engine Harness - Right Rear (L3B)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J170	Engine Harness	VTI/WMI	• (L3B) In the engine compartment, approximately 7 cm (2.4 in) from breakout to B75C Multifunction Intake Air Sensor • (L84/L87) In the engine compartment, approximately 15 cm (5.9 in) from breakout to inline connector X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LM2) In the engine compartment, left side, approximately 13 cm (5.1 in) from breakout to B1 A/C Refrigerant Pressure Sensor	• *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—
J171	Active Grille Air Shutter 1 Actuator Jumper Harness	VTI/WMI	In the engine compartment, front center, within Active Grille Air Shutter 1 Actuator Jumper Harness	*Engine Compartment - Engine Harness - Left Front (LM2)*	—
J174	Engine Harness	MQB/MQE	• (L3B) In the engine compartment, approximately 11 cm (4.3 in) from breakout to B75C Multifunction Intake Air Sensor • (L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body • (LM2) In the engine compartment, front center, approximately 5 cm (2 in) from breakout to B34J Engine Coolant Temperature Sensor 7	• *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—
J175	Engine Harness	L3B/LM2	• (L3B) In the engine compartment, approximately 25 cm (9.8 in) from breakout to K69 Transfer Case Control Module • (LM2) In the engine compartment, left side, approximately 6 cm (2.4 in) from breakout to B1 A/C Refrigerant Pressure Sensor	• *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—
J176	Engine Harness	LM2	In the engine compartment, left side, approximately 17 cm (6.7 in) from breakout to inline connector X172	• *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J177	Engine Harness	LM2	In the engine compartment, left side, approximately 22 cm (8.7 in) from breakout to inline connector X172	- Engine Compartment - Engine Harness - Left Front (LM2) - Engine Compartment - Engine Harness - Right Front (LM2)	—
J178	Engine Harness	L3B/LV3/L82/ L84/L87	- (L3B) In the engine compartment, approximately 6 cm (2.4 in) from breakout towards ignition coils and camshaft sensors/ actuators - (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness - (LM2) In the engine compartment, approximately 4 cm (1.6 in) from breakout to B35 Engine Oil Level Switch, towards the rear of the vehicle	- Engine Compartment - Engine Harness - Left Front (L3B) - Engine Compartment - Engine Harness - Left Front (L82)	—
J179	Engine Harness	LV3/L82/L84/ L87	- (L82/L84/L87) In the engine compartment, middle rear, in harness channel on the back of the intake manifold - (LV3) In the engine compartment, front center, approximately 11 cm (4.3 in) from breakout to inline connector X154	- Engine Compartment - Engine Harness - Left (LV3) - Engine Compartment - Engine Harness - Right Rear (L82) - Engine Compartment - Engine Harness - Right Rear (L84/L87)	—
J182	Engine Harness	L3B/LM2	- (L3B) In the engine compartment, approximately 19 cm (7.5 in) from breakout to B75C Multifunction Intake Air Sensor - (LM2) In the engine compartment, approximately 10 cm (3.9 in) from breakout to K69 Transfer Case Control Module	- Engine Compartment - Engine Harness - Left Front (L3B) - Engine Compartment - Engine Harness - Left Front (LM2)	—
J183	Transmission Control Harness	—	Under the vehicle, within T12 Automatic Transmission Assembly, in transmission control harness	—	—
J184	Transmission Case Harness	MQB	Under the vehicle, within T12 Automatic Transmission Assembly, in transmission case harness	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J185	Transmission Case Harness	MQB	Under the vehicle, within T12 Automatic Transmission Assembly, in transmission case harness	—	—
J186	Transmission Case Harness	—	Under the vehicle, within T12 Automatic Transmission Assembly, in transmission case harness	—	—
J187	Transmission Control Harness	—	Under the vehicle, within T12 Automatic Transmission Assembly, in transmission control harness	—	—
J188	Transmission Case Harness	MQB	Under the vehicle, within T12 Automatic Transmission Assembly, in transmission case harness	—	—
J189	Engine Harness	L3B	In the engine compartment, right side, approximately 4 cm (1.6 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness	*Engine Compartment - Engine Harness - Right Rear (L3B)*	—
J190	Engine Harness	LM2	In the engine compartment, front center, approximately 3 cm (1.2 in) from branch out to Q38 Throttle Body, B95A Nitrogen Oxides Sensor 1, and B193B Charge Air Cooler Outlet Temperature Sensor	• *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	—
J191	Engine Harness	LM2	In the engine compartment, front center, in cable channel, in breakout towards Q38 Throttle Body, B95A Nitrogen Oxides Sensor1, and B193B Charge Air Cooler Outlet Temperature Sensor	*Engine Compartment - Engine Harness - Right Front (LM2)*	—
J192	Chassis Harness	JL1	In the engine compartment, right side, approximately 10 cm (3.9 in) from breakout to X50A Fuse Block - Underhood, towards the rear of the vehicle	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J200	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 22 cm (8.7 in) from breakout to B22 Brake Pedal Position Sensor, towards center of vehicle	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)* • *Passenger Compartment - Body Harness - Left Front (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J201	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 15 cm (5.9 in) from breakout to B22 Brake Pedal Position Sensor, towards center of vehicle	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Left Front (Extended Cab) • Passenger Compartment - Body Harness - Left Front (Regular Cab)	—
J202	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 24 cm (9.4 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Left Front (Regular Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab)	—
J203	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 20 cm (7.9 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Left Front (Regular Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab)	—
J204	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 27 cm (10.6 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	—	—
J205	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 31 cm (12.2 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	—	—
J206	Body Harness	—	In the passenger compartment, right front, forward of instrument panel, approximately 52 cm (20.5 in) from breakout to bulkhead grommet, towards center of vehicle	Passenger Compartment - Body Harness - Right Front (Regular Cab)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J207	Body Harness	—	In the passenger compartment, right front, forward of instrument panel, approximately 49 cm (19.3 in) from breakout to bulkhead grommet, towards center of vehicle	• *Passenger Compartment - Body Harness - Right Front (Crew Cab)* • *Passenger Compartment - Body Harness - Right Front (Extended Cab)* • *Passenger Compartment - Body Harness - Right Front (Regular Cab)*	—
J208	Body Harness	—	In the passenger compartment, right front, forward of instrument panel, approximately 5 cm (2 in) from breakout to bulkhead grommet, towards center of vehicle	*Passenger Compartment - Body Harness - Right Front (Regular Cab)*	—
J209	Body Harness	—	In the passenger compartment, left front, approximately 19 cm (7.5 in) from breakout towards X51L Fuse Block - Instrument Panel and inline connector X225, towards the rear of the vehicle	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)*	—
J210	Body Harness	A48	In the passenger compartment, left front, behind left front kick panel, in breakout to X51L Fuse Block - Instrument Panel Left	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)*	—
J212	Body Harness	—	• (Regular Cab) In the passenger compartment, front center, forward of instrument panel, approximately 19 cm (7.5 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle • (Extended Cab/Crew Cab) In the passenger compartment, front center, forward of instrument panel, approximately 15 cm (5.9 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	—	—
J225	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, behind S30 Headlamp Switch	*Instrument Panel Harness*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J226	Instrument Panel Harness	-BTM	In the passenger compartment, left front, within instrument panel, approximately 13 cm (5.1 in) from breakout to P16 Instrument Cluster, towards the left side of the vehicle	*Instrument Panel Harness*	—
J227	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, approximately 9 cm (3.5 in) from breakout to B10B Ambient Light/Sunload Sensor	*Instrument Panel Harness*	—
J228	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, approximately 10 cm (3.9 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle	*Instrument Panel Harness*	—
J229	Instrument Panel Harness	UV6	In the passenger compartment, left front, within instrument panel, approximately 10 cm (3.9 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle	*Instrument Panel Harness*	—
J230	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, approximately 24 cm (9.4 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle	*Instrument Panel Harness*	—
J231	Instrument Panel Harness	UE1	In the passenger compartment, left front, within instrument panel harness, in breakout to K56 Serial Data Gateway Module	*Instrument Panel Harness*	—
J232	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel harness, in breakout to K56 Serial Data Gateway Module	*Instrument Panel Harness*	—
J233	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 4 cm (1.6 in) from breakout to K60 Steering Column Lock Module, towards the right side of the vehicle	*Instrument Panel Harness*	—
J234	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 14 cm (5.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the left side of the vehicle	*Instrument Panel Harness*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J235	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 9 cm (3.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the left side of the vehicle	*Instrument Panel Harness*	—
J236	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 24 cm (9.4 in) from breakout to K60 Steering Column Lock Module, towards the right side of the vehicle	*Instrument Panel Harness*	—
J237	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 12 cm (4.7 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness*	—
J238	Instrument Panel Harness	UEU/UE1/UDD	In the passenger compartment, front center, within instrument panel, approximately 12 cm (4.7 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness*	—
J239	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 2 cm (.8 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness*	—
J240	Instrument Panel Harness	JL1	In the passenger compartment, front center, within instrument panel, approximately 29 cm (3.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness*	—
J241	Instrument Panel Harness	—	In the passenger compartment, front, within instrument panel, on the left side of the instrument panel, in breakout going towards the floor	*Instrument Panel Harness*	—
J242	Instrument Panel Harness	—	In the passenger compartment, right front, within instrument panel, in front of the left side of the glove box	*Instrument Panel Harness*	—
J243	Instrument Panel Harness	KL9	In the passenger compartment, within the instrument panel, approximately 5 cm (2 in) from breakout to in-line connector X256	*Instrument Panel Harness*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J244	Instrument Panel Harness	KL9	In the passenger compartment, within instrument panel, front center, approximately 4 cm (1.6 in) from breakout to X80G Accessory Power Receptacle - Instrument Panel	*Instrument Panel Harness*	—
J271	Steering Wheel Harness	KI3	In the passenger compartment, within the steering wheel	—	—
J281	Body Harness	—	In the passenger compartment, left front, below driver A-pillar, between breakout to B22 Brake Pedal Position Sensor and breakout to inline connector X500 Driver Door Harness to Body Harness	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)* • *Passenger Compartment - Body Harness - Left Front (Regular Cab)*	—
J282	Body Harness	—	• (Extended Cab/Crew Cab) In the passenger compartment, right rear, in harness cable, beneath right rear seat cushion • (Regular Cab) In the passenger compartment, right front, approximately 5 cm (2 in) from breakout to X51R Fuse Block - Instrument Panel Right	• *Passenger Compartment - Body Harness - Right Front (Extended Cab)* • *Passenger Compartment - Body Harness - Right Front (Regular Cab)*	—
J297	Steering Wheel Harness	—	In the passenger compartment, left front, within steering wheel	—	—
J301	Body Harness	BOP	In the passenger compartment, right front, approximately 45 cm (17.8 in) from breakout to X51R Fuse Block - Instrument Panel Right, towards the rear of the vehicle	—	—
J302	Body Harness	BOP	In the passenger compartment, right front, approximately 51 cm (20.1 in) from breakout to X51R Fuse Block - Instrument Panel Right, towards the rear of the vehicle	—	—
J310	Driver Seat Harness	A45	In the passenger compartment, left front, within driver seat	—	—
J311	Driver Seat Harness	A45/A2X	In the passenger compartment, left front, within driver seat	—	—
J314	Driver Seat Harness	—	In the passenger compartment, left front, within driver seat	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J316	Driver Seat Harness	KQV	In the passenger compartment, left front, within driver seat	—	—
J317	Driver Seat Harness	KQV	In the passenger compartment, left front, within driver seat	—	—
J319	Driver Seat Harness	KA1	In the passenger compartment, left front, within driver seat	—	—
J321	Body Harness	(BTM+(BOP/UD5/UD7)/((UD5/UD7)+BOP)	In the passenger compartment, left front, approximately 15 cm (5.9 in) from breakout to inline connector X310 and ground G308, towards the left side of the vehicle	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)* • *Passenger Compartment - Body Harness - Left Front (Regular Cab)*	—
J322	Body Harness	—	In the passenger compartment, left front, approximately 11 cm (4.3 in) from breakout to K36 Inflatable Restraint Sensing and Diagnostic Module	—	—
J323	Body Harness	—	In the passenger compartment, under the passenger seat, approximately 35 cm (13.8 in) from breakout to inline connector X348, towards the right side of the vehicle	• *Passenger Compartment - Body Harness - Left Front (Regular Cab)* • *Passenger Compartment - Body Harness - Right Front (Crew Cab)*	—
J324	Passenger Seat Harness	A45/A2X	In the passenger compartment, right front, within passenger seat harness	—	—
J325	Body Harness	—	In the passenger compartment, left front, approximately 7 cm (2.8 in) from breakout to the driver seat, towards the front of the vehicle	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)* • *Passenger Compartment - Body Harness - Left Front (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J326	Body Harness	—	• (Extended Cab/Crew Cab) In the passenger compartment, right side, approximately 12 cm (4.7 in) from breakout to ground G320 and ground G318, towards the front of the vehicle • (Regular Cab) In the passenger compartment, right side, approximately 24 cm (9.4 in) from breakout to ground G320 and ground G318, towards the front of the vehicle	• *Passenger Compartment - Body Harness - Right Front (Crew Cab)* • *Passenger Compartment - Body Harness - Right Front (Extended Cab)* • *Passenger Compartment - Body Harness - Right Front (Regular Cab)* • *Passenger Compartment - Body Harness - Right Rear (Regular Cab)*	—
J327	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 8 cm (3.1 in) from breakout to B22 Brake Pedal Position Sensor, towards center of vehicle	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)* • *Passenger Compartment - Body Harness - Left Front (Regular Cab)*	—
J328	Passenger Seat Harness	KQV	In the passenger compartment, right front, within passenger seat harness	—	—
J329	Body Harness	KA1	In the passenger compartment, right front, within passenger seat back	—	—
J330	Body Harness	UVI/UVS	In the passenger compartment, right rear, in harness cable, beneath right rear seat cushion	• *Passenger Compartment - Body Harness - Right Front (Crew Cab)* • *Passenger Compartment - Body Harness - Right Rear (Extended Cab/Crew Cab)*	—
J331	Passenger Seat	KQV	In the passenger compartment, right front, within passenger seat harness	—	—
J333	Floor Console Harness	KA6	In the passenger compartment, front center, beneath floor console, approximately 5 cm (2 in) from breakout to inline connector X348	*Center Console - Floor Console Harness*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J334	Floor Console Harness	D07	In the passenger compartment, front center, beneath floor console, approximately 13 cm (5.1 in) from breakout to inline connector X348	*Center Console - Floor Console Harness*	—
J335	Floor Console Harness	AZ3/D07	In the passenger compartment, front center, beneath floor console, approximately 21 cm (8.3 in) from breakout to inline connector X348	*Center Console - Floor Console Harness*	—
J336	Floor Console Harness	IOS/IOT	In the passenger compartment, beneath floor console, in the breakout to X83 Auxiliary Audio Input	*Center Console - Floor Console Harness*	—
J351	Headliner Harness	—	In passenger compartment, right front, behind passenger side A-pillar trim panel	• *Roof - Headliner Harness (Regular Cab)* • *Roof - Headliner Harness (Extended Cab/Crew Cab)*	—
J353	Headliner Harness	DH6	In passenger compartment, right front, above headliner, right of breakout to A3R Sunshade - Right	• *Roof - Headliner Harness (Regular Cab)* • *Roof - Headliner Harness (Extended Cab/Crew Cab)*	—
J354	Headliner Harness	DD8/DRZ/UEU	• (Regular Cab/Crew Cab) In passenger compartment, front, above headliner, between breakout to B24RF Mobile Telephone Microphone - Right Front and breakout to A98 Front Overhead Console Assembly • (Extended Cab) In the passenger compartment, right front, behind passenger side A-pillar trim panel	*Roof - Headliner Harness (Extended Cab/Crew Cab)*	—
J355	Headliner Harness	Extended Cab/Crew Cab	In the passenger compartment, right front, above headliner, near passenger A-pillar, in breakout towards rear of vehicle	*Roof - Headliner Harness (Extended Cab/Crew Cab)*	—
J370	Rear Seat Harness	KA6	In the passenger compartment, rear, within rear seat	—	—
J390	Chassis Harness	LM2	Under the vehicle, right side, in breakout above the right side of the transmission cross member	—	—
J391	Chassis Harness	LM2	Outside of the vehicle, below right rear door, outside of the frame rail, in breakout to B136 Exhaust Particulate Matter Sensor	*Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J392	Chassis Harness	LM2	Outside of the vehicle, below right rear door, outside of the frame rail, in breakout to B136 Exhaust Particulate Matter Sensor	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	—
J393	Chassis Harness	LM2	Under the vehicle, right side, approximately 30 cm (11.8 in) from breakout towards transmission cross member, towards the rear of the vehicle	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	—
J394	Chassis Harness	BRS	Outside of the vehicle, below right rear door, outside of the frame rail, approximately 27 cm (10.6 in) from breakout to K4 Assist Step Control Module, towards the front of the vehicle	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	—
J410	Left Tail Lamp Harness	—	Outside of the vehicle, left rear corner, within E42L Tail Lamp Assembly - Left	—	—
J411	Left Tail Lamp Harness	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	—	—
J412	Left Tail Lamp Harness	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	—	—
J420	Right Tail Lamp Harness	—	Outside of the vehicle, right rear corner, within E42R Tail Lamp Assembly - Right	—	—
J421	Right Tail Lamp Harness	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	—	—
J422	Right Tail Lamp Harness	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	—	—
J475	Chassis Harness	LM2	Under the vehicle, right rear corner, inside of the right frame rail, approximately 21 cm (8.3 in) from breakout towards fuel tank, towards the front of the vehicle	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	—
J476	Chassis Harness	—	• (Regular Cab) Under the vehicle, right rear corner, inside of the right frame rail, approximately 5 cm (2 in) from breakout towards fuel tank, towards the front of the vehicle • (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of the right frame rail, approximately 16 cm (6.3 in) from breakout towards fuel tank, towards the front of the vehicle	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Regular Cab)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J477	Chassis Harness	—	• (Regular Cab) Under the vehicle, right rear corner, approximately 16 cm (6.3 in) from breakout towards inline connectors X420, X450, and X901 • (Extended Cab/Crew Cab) Under the bed, right rear, inside of the right frame rail, approximately 51 cm (20.1 in) from breakout towards the fuel tank, towards the rear of the vehicle	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J478	Chassis Harness	—	• (Regular Cab) Under the vehicle, right rear corner, approximately 24 cm (9.4 in) from breakout towards inline connectors X420, X450, and X901 • (Extended Cab/Crew Cab) Under the bed, right rear, inside of the right frame rail, approximately 58 cm (22.8 in) from breakout towards the fuel tank, towards the rear of the vehicle	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J479	Chassis Harness	U1D	• (Regular Cab) Under the vehicle, right rear corner, inside of right side frame rail, approximately 6 cm (2.4 in) from breakout to K133 Trailer Brake Power Control Module, towards the front of the vehicle • (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of right side frame rail, approximately 10 cm (3.9 in) from breakout to K101 Trailer Interface Control Module/K133 Trailer Brake Power Control Module, towards the front of the vehicle	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J480	Chassis Harness	—	• (Regular Cab) Under the vehicle, right rear corner, approximately 28 cm (11 in) from breakout towards inline connectors X420, X450, and X901 • (Extended Cab/Crew Cab) Under the vehicle, at the right rear corner, approximately 28 cm (11 in) from breakout to inline connector X420 Right Tail lamp Harness to Body Harness, towards the front of the vehicle	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J481	Chassis Harness	—	Under the truck bed, rear center, approximately 6 cm (2.4 in) from breakout to ground G400.	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J482	Chassis Harness	IOS/IOT	At the rear of the vehicle, in front of the rear bumper, in breakout to T10E Keyless Entry Antenna - Rear Compartment	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J483	Chassis Harness	IOS/IOT	At the rear of the vehicle, in front of the rear bumper, in breakout to T10E Keyless Entry Antenna - Rear Compartment	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	—
J484	Chassis Harness	BOP	Under the truck bed, at the rear of the vehicle, in breakout to B342D Low Energy Remote Control Access Sensor Transceiver 4	—	—
J485	Chassis Harness	BOP	Under the truck bed, at the rear of the vehicle, in breakout to B342B Low Energy Remote Control Access Sensor Transceiver 2	—	—
J487	Trailer Jumper Harness	8S3	Underneath the rear of the vehicle, in the trailer jumper harness, forward of X88 Trailer Connector	—	—
J490	Rear Bumper Harness	UD5/UD7	At the rear of the vehicle, left of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	*Rear of Vehicle - Rear Bumper Harness*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J491	Rear Bumper Harness	UKC	At the rear of the vehicle, left of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	Rear of Vehicle - Rear Bumper Harness	—
J492	Rear Bumper Harness	UKC	At the rear of the vehicle, center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	Rear of Vehicle - Rear Bumper Harness	—
J493	Rear Bumper Harness	UKC	At the rear of the vehicle, center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	Rear of Vehicle - Rear Bumper Harness	—
J494	Rear Bumper Harness	E63	At the rear of the vehicle, right of center, approximately 5 cm (2 in) from breakout to inline connector X901 Rear Bumper Harness to Chassis Harness	Rear of Vehicle - Rear Bumper Harness	—
J495	Rear Bumper Harness	UD5/UD7	At the rear of the vehicle, within the rear bumper harness, in breakout to B306F Parking Assist Sensor - Rear Left Middle	Rear of Vehicle - Rear Bumper Harness	—
J496	Rear Bumper Harness	E63	At the rear of the vehicle, within the rear bumper harness, in breakout to E7L License Plate Lamp - Left	Rear of Vehicle - Rear Bumper Harness	—
J501	Driver Door Harness	—	In driver door, between breakout to P19AG Speaker - Left Front Door and breakout to B63LF Side Impact Sensor - Left Front	—	—
J502	Driver Door Harness	—	• (Regular Cab) In driver door, between breakout to B63LF Side Impact Sensor - Left Front and breakout to A24D Door Handle Assembly - Driver Exterior • (Extended Cab/Crew Cab) In driver door, between breakout to B63LF Side Impact Sensor - Left Front and breakout to A24D Door Handle Assembly - Driver Exterior	Doors - Driver and Passenger Door Harnesses	—
J503	Driver Door Trim Harness	—	Attached to driver door trim, between breakout to S146 Window/Outside Rearview Mirror Switch and breakout to E63D Flood Lamp - Driver Door Handle	Doors - Driver and Passenger Door Trim Harnesssses	—
J510	Driver Outside Rearview Mirror Harness	—	Outside of the vehicle, left side, inside of A9A Outside Rearview Mirror - Driver	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J601	Passenger Door Harness	AEF	In passenger door, between breakout to P19AH Speaker - Right Front Door and breakout to B63RF Side Impact Sensor - Right Front	Doors - Driver and Passenger Door Harnesses	—
J602	Passenger Door Harness	—	• (Regular Cab) In passenger door, between breakout to B63RF Side Impact Sensor - Right Front and breakout to A24P Door Handle Assembly - Passenger Exterior • (Extended Cab/Crew Cab) In passenger door, between breakout to P19AH Speaker - Right Front Door and breakout to B63RF Side Impact Sensor - Right Front	Doors - Driver and Passenger Door Harnesses	—
J603	Passenger Door Harness	—	Attached to passenger door trim, between breakout to S79P Window Switch - Passenger and breakout to E63P Flood Lamp - Passenger Door Handle	Doors - Driver and Passenger Door Trim Harnessses	—
J610	Passenger Outside Rearview Mirror Harness	—	Outside of the vehicle, right side, inside of A9B Outside Rearview Mirror - Passenger	—	—
J701	Left Rear Door Harness	Extended Cab/ Crew Cab	• (Extended Cab) In left rear door, in the left rear door harness, approximately 13 cm (5.1 in) from breakout to B63LR Side Impact Sensor - Left Rear, towards the rear of the vehicle • (Crew Cab) In the left rear door, in the left rear door harness, approximately 12 cm (4.7 in) from breakout to M74LR Window Motor - Left Rear, towards the rear of the vehicle	• Doors - Left Rear and Right Rear Door Harnesses (Crew Cab) • Doors - Left Rear and Right Rear Door Harnesses (Extended Cab)	—
J801	Right Rear Door Harness	Extended Cab/ Crew Cab	• (Extended Cab) In the right rear door, in the right rear door harness, approximately 5 cm (2 in) from breakout to P19AM Speaker - Right Rear Door, towards the rear of the vehicle • (Crew Cab) In the right rear door, in the right rear door harness, approximately 12 cm (4.7 in) from breakout to M74RR Window Motor - Right Rear, towards the rear of the vehicle	• Doors - Left Rear and Right Rear Door Harnesses (Crew Cab) • Doors - Left Rear and Right Rear Door Harnesses (Extended Cab)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J900	Endgate Harness	QT5	In the endgate, approximately 16 cm (6.3 in) from breakout to inline connector X926, towards left side of vehicle	*Rear of Vehicle - Endgate Harness (QK2)*	—
J901	Endgate Harness	QT5	In the endgate, approximately 28 cm (11 in) from breakout to inline connector X926, towards left side of vehicle	*Rear of Vehicle - Endgate Harness (QK2)*	—
J902	Endgate Harness	QK2	In the endgate, approximately 38 cm (15 in) from breakout to inline connector X926, towards left side of vehicle	*Rear of Vehicle - Endgate Harness (QK2)*	—
J903	Endgate Harness	QK2	In the endgate, approximately 51 cm (20 in) from breakout to inline connector X926, towards left side of vehicle	*Rear of Vehicle - Endgate Harness (QK2)*	—
J904	Endgate Harness	QT5/QT6	• (QK1) In the endgate, approximately 14 cm (5.5 in) from breakout to A99L Pickup Box Endgate Latch - Left • (QK2) In the endgate, approximately 22 cm (8.7 in) from breakout to E8L Liftgate Courtesy Lamp	*Rear of Vehicle - Endgate Harness (QK2)*	—
K111	Fuel Pump Driver Control Module	—	Under the vehicle, mounted above the driveshaft, inboard of the fuel tank	—	• *K111 Fuel Pump Driver Control Module (L3B/L82/L84/L87/LV3)* • *K111 Fuel Pump Driver Control Module (LM2)*
K115	Reductant Control Module	LM2	Under the vehicle, right side, in front of rear axle, mounted to the right side of reductant tank	—	*K115 Reductant Control Module (LM2)*
K133	Trailer Brake Power Control Module	JL1	Under the vehicle, mounted to the bracket above the spare tire	—	*K133 Trailer Brake Power Control Module (JL1)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K157	Video Processing Control Module	UVI/UV2	In the passenger compartment, right rear, mounted behind the rear seat, below the rear window	Passenger Compartment - Right Rear (Extended Cab/Crew Cab)	• K157 Video Processing Control Module X1 (UVI/UVS) • K157 Video Processing Control Module X3 (UVI/UVS) • K157 Video Processing Control Module X4 (UVI/UVS) • K157 Video Processing Control Module X5 (UVI) • K157 Video Processing Control Module X5 (UVS) • K157 Video Processing Control Module X6 (UVS) • K157 Video Processing Control Module X7 (UVS)
K160	Brake System Control Module	—	In the engine compartment, left rear corner, near brake master cylinder	Engine Compartment Components - Top	K160 Brake System Control Module
K166L	Multifunction LED Control Module - Left Headlamp	—	At the left front of vehicle, within E13LA Headlamp Assembly - Left	• Headlamps - Up Level (X88) • Headlamps - Up Level (Z88)	• K166L Multifunction LED Control Module - Left Headlamp (GFD) • K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)
K166R	Multifunction LED Control Module - Right Headlamp	—	At the right front of vehicle, within E13RA Headlamp Assembly - Right	• Headlamps - Up Level (X88) • Headlamps - Up Level (Z88)	• K166R Multifunction LED Control Module - Right Headlamp (GFD) • K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)
K182	Parking Assist Control Module	UD5/UD7	In the passenger compartment, mounted to the driver side of the rear wall	• Passenger Compartment - Left Rear (Extended Cab/Crew Cab) • Passenger Compartment - Left Rear (Regular Cab)	• K182 Parking Assist Control Module X1 (UD5/UD7) • K182 Parking Assist Control Module X2 (UD5/UD7) • K182 Parking Assist Control Module X3 (UD5/UD7)
K183	UHF Short Range Low Energy Remote Control Access Transceiver	BOP	In the passenger compartment, right rear, beneath right rear seat	—	K183 UHF Short Range Low Energy Remote Control Access Transceiver (BOP)
K19	Suspension Control Module	—	Under the vehicle, mounted to the bracket above the spare tire	—	K19 Suspension Control Module (Z45)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K194	Rear Gate Module	QT6	At the rear of the vehicle, inside of the endgate, behind trim panel, lower left side	*Endgate Components (QT6)*	*K194 Rear Gate Module (QT6)*
K20	Engine Control Module	—	In the engine compartment, left front, behind E13LA Headlamp Assembly - Left	*Engine Compartment Components - Bottom*	• *K20 Engine Control Module X1 (L3B)* • *K20 Engine Control Module X1 (L82)* • *K20 Engine Control Module X1 (L84/L87)* • *K20 Engine Control Module X1 (LM2)* • *K20 Engine Control Module X1 (LV3)* • *K20 Engine Control Module X2 (L3B)* • *K20 Engine Control Module X2 (L82)* • *K20 Engine Control Module X2 (L84/L87)* • *K20 Engine Control Module X2 (LM2)* • *K20 Engine Control Module X2 (LV3)* • *K20 Engine Control Module X3 (L3B)* • *K20 Engine Control Module X3 (L82)* • *K20 Engine Control Module X3 (L84/L87)* • *K20 Engine Control Module X3 (LV3)*
K214	Trailer Tire Pressure Indicator Module	PTT	At the rear of the vehicle, mounted to the center of the rear bumper, near X88 Trailer Connector	—	*K214 Trailer Tire Pressure Indicator Module (PTT)*
K29F	Seat Heating Control Module - Front	KQV/KA1	In the passenger compartment, right front, under the front of the passenger seat	*Passenger Seat Components*	• *K29F Seat Heating Control Module - Front X1 (KA1)* • *K29F Seat Heating Control Module - Front X2 (KA1)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K29R	Seat Heating Control Module - Rear	KA6	In the passenger compartment, rear center, underneath the front of the rear seat cushion	*Rear Seat Components*	- *K29R Seat Heating Control Module - Rear X1 (KA1)* - *K29R Seat Heating Control Module - Rear X1 (KA6)* - *K29R Seat Heating Control Module - Rear X2 (KA1)* - *K29R Seat Heating Control Module - Rear X2 (KA6)*
K32	Steering Wheel Heating Control Module	KI3	In the passenger compartment, in the steering wheel, behind the driver air bag	—	- *K32 Steering Wheel Heating Control Module X1 (UVD)* - *K32 Steering Wheel Heating Control Module X2 (UVD)*
K33	HVAC Control Module	—	In the passenger compartment, left front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	- *K33 HVAC Control Module X1* - *K33 HVAC Control Module X2* - *K33 HVAC Control Module X3* - *K33 HVAC Control Module X4*
K34	Glow Plug Control Module	LM2	In the engine compartment, mounted to the top of the engine	—	- *K34 Glow Plug Control Module X1 (LM2)* - *K34 Glow Plug Control Module X2 (LM2)*
K36	Inflatable Restraint Sensing and Diagnostic Module	—	In the passenger compartment, bolted to the floor between the front seats or under console if equipped	- *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* - *Passenger Compartment - Right Rear (Regular Cab)*	- *K36 Inflatable Restraint Sensing and Diagnostic Module X1* - *K36 Inflatable Restraint Sensing and Diagnostic Module X2*
K4	Assist Step Control Module	—	Underneath the vehicle, along the outside of the left frame rail, near the driver door	—	- *K4 Assist Step Control Module X1 (BRS)* - *K4 Assist Step Control Module X2 (BRS)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K40	Seat Memory Control Module	A45	In the passenger compartment, under the driver seat	*Driver Seat Components*	• *K40 Seat Memory Control Module X1 (A45)* • *K40 Seat Memory Control Module X2 (A45)* • *K40 Seat Memory Control Module X3 (A45)* • *K40 Seat Memory Control Module X5 (A45)* • *K40 Seat Memory Control Module X6 (A45)*
K43	Power Steering Control Module	—	Under the vehicle, part of the steering gear assembly	*Engine Compartment Components - Bottom*	• *K43 Power Steering Control Module X1* • *K43 Power Steering Control Module X2* • *K43 Power Steering Control Module X3*
K56	Serial Data Gateway Module	—	In the passenger compartment, left front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	• *K56 Serial Data Gateway Module X1* • *K56 Serial Data Gateway Module X2*
K60	Steering Column Lock Module	BTM	In the passenger compartment, left front, mounted on top of the steering column, underneath instrument panel	*Steering Column Components*	*K60 Steering Column Lock Module (BTM)*
K68	Trailer Lighting Control Module	U1D	Under the rear of the vehicle, near spare tire	—	*K68 Trailer Lighting Control Module (U1D)*
K69	Transfer Case Control Module	NP0/NQH	In the engine compartment, left rear, left of K160 Brake System Control Module	*Engine Compartment Components - Top*	*K69 Transfer Case Control Module (NP0/ NQH)*
K71	Transmission Control Module	—	• (MQB/MQE) In the engine compartment, left front, behind left corner of the radiator • (MYC) In the engine compartment, inside the T12 Automatic Transmission Assembly, part of the control solenoid valve	—	• *K71 Transmission Control Module (MQB)* • *K71 Transmission Control Module (MQE+L84)* • *K71 Transmission Control Module (MQE+L3B)*
K73	Telematics Communication Interface Control Module	UE1	In the passenger compartment, left front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	• *K73 Telematics Communication Interface Control Module X1 (UE1)* • *K73 Telematics Communication Interface Control Module X5 (UE1)* • *K73 Telematics Communication Interface Control Module X7 (UE1)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K77	Remote Control Door Lock Receiver	—	• (Early Production) In the passenger compartment, right rear corner, below headliner • (Late Production) In the passenger compartment, left rear corner, below headliner	• *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)* • *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Right Rear (Regular Cab)*	*K77 Remote Control Door Lock Receiver*
K8	Blower Motor Control Module	—	In the passenger compartment, right front, within instrument panel, mounted to the bottom right side of the HVAC housing	—	*K8 Blower Motor Control Module X1*
K84	Keyless Entry Control Module	BTM	In the passenger compartment, left front, between the instrument panel and bulkhead	*Behind Instrument Panel - Left*	• *K84 Keyless Entry Control Module X1 (BTM)* • *K84 Keyless Entry Control Module X2 (BTM)*
K85	Passenger Presence Module	—	In the passenger compartment, in the passenger seat cushion	*Passenger Seat Components*	*K85 Passenger Presence Module*
K89	Immobilizer Control Module	—	In the passenger compartment, on the left side of the steering column, below S78 Turn Signal/Multifunction Switch	• *Floor Console Components* • *Steering Column Components*	• *K89 Immobilizer Control Module (AZ3)* • *K89 Immobilizer Control Module (-AZ3)* • *K89 Immobilizer Control Module (-BTM)*
K9	Body Control Module	—	In the passenger compartment, behind the driver side of the instrument panel, outboard of the steering column	• *Behind Instrument Panel - Left* • *Instrument Panel - Rear*	• *K9 Body Control Module X1* • *K9 Body Control Module X2* • *K9 Body Control Module X3* • *K9 Body Control Module X4* • *K9 Body Control Module X5* • *K9 Body Control Module X6* • *K9 Body Control Module X7*
M10	Charge Air Cooler Coolant Pump	LM2	In the engine compartment, left front, attached to bracket near the front of the left lower control arm	—	*M10 Charge Air Cooler Coolant Pump (LM2)*
M103	Turbocharger Vane Position Actuator	LM2	In the engine compartment, right side, mounted to turbocharger	*Engine Components - Right Rear (LM2)*	*M103 Turbocharger Vane Position Actuator (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M104L	Park Brake Actuator - Left	—	Under the vehicle, left rear, attached to the left rear brake caliper	Brake and Suspension Components	M104L Park Brake Actuator - Left
M104R	Park Brake Actuator - Right	—	Under the vehicle, right rear, attached to the right rear brake caliper	Brake and Suspension Components	M104R Park Brake Actuator - Right
M122	Exhaust Pressure Control Valve Actuator	LM2	In the engine compartment, right rear, mounted to the exhaust, near the lower right side of the transmission bellhousing	Engine Components - Right Rear (LM2)	M122 Exhaust Pressure Regulator Valve (LM2)
M125	Pickup Box Endgate Power Assist Actuator	QT6	Outside of the vehicle, within the endgate, lower right corner	Endgate Components (QT6)	M125 Pickup Box Endgate Power Assist Actuator (QT6)
M128	Turbocharger Wastegate Actuator	L3B	In the engine compartment, right side of engine, mounted to the front of the turbocharger compressor	Engine Components - Right Front (L3B)	M128 Turbocharger Wastegate Actuator (L3B)
M129A	Intake Camshaft Profile Actuator 1	L3B	In the engine compartment, center, left of T8A Ignition Coil 1	Engine Components - Top (L3B)	M129A Intake Camshaft Profile Actuator 1 (L3B)
M129B	Intake Camshaft Profile Actuator 2	L3B	In the engine compartment, center, left of T8B Ignition Coil 2	Engine Components - Top (L3B)	M129B Intake Camshaft Profile Actuator 2 (L3B)
M129C	Intake Camshaft Profile Actuator 3	L3B	In the engine compartment, center, left of T8C Ignition Coil 3	Engine Components - Top (L3B)	M129C Intake Camshaft Profile Actuator 3 (L3B)
M129D	Intake Camshaft Profile Actuator 4	L3B	In the engine compartment, center, left of T8D Ignition Coil 4	Engine Components - Top (L3B)	M129D Intake Camshaft Profile Actuator 4 (L3B)
M130B	Exhaust Camshaft Profile Actuator 2	L3B	In the engine compartment, center, right of T8B Ignition Coil 2	Engine Components - Top (L3B)	M130B Exhaust Camshaft Profile Actuator 2 (L3B)
M130C	Exhaust Camshaft Profile Actuator 3	L3B	In the engine compartment, center, right of T8C Ignition Coil 3	Engine Components - Top (L3B)	M130C Exhaust Camshaft Profile Actuator 3 (L3B)
M26	Front Axle Engagement Actuator	NP0/NQH	Under the vehicle, mounted to the front axle	Engine Compartment Components - Bottom	M26 Front Axle Engagement Actuator (NP0/NQH)
M37	Mode Door Actuator	—	In the passenger compartment, right front, within instrument panel, attached to HVAC assembly	—	M37 Mode Door Actuator
M38	Power Steering Motor	—	Under the vehicle, part of the steering gear assembly	—	—
M4	Air Inlet Door Actuator	—	In the passenger compartment, behind the instrument panel glove box	—	M4 Air Inlet Door Actuator
M50D	Seat Front Vertical Motor - Driver	—	In the passenger compartment, under the driver seat	Driver Seat Components	• M50D Seat Front Vertical Motor - Driver (A2K+A45) • M50D Seat Front Vertical Motor - Driver (A2K-A45)
M50P	Seat Front Vertical Motor - Passenger	—	In the passenger compartment, under the passenger seat	Passenger Seat Components	M50P Seat Front Vertical Motor - Passenger (A7K)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M51D	Seat Horizontal Motor - Driver	—	In the passenger compartment, under the driver seat	*Driver Seat Components*	• *M51D Seat Horizontal Motor - Driver (A2X-A45)* • *M51D Seat Horizontal Motor - Driver (A45)*
M51P	Seat Horizontal Motor - Passenger	—	In the passenger compartment, under the passenger seat	*Passenger Seat Components*	*M51P Seat Horizontal Motor - Passenger (A7K)*
M55D	Seat Rear Vertical Motor - Driver	—	In the passenger compartment, under the driver seat	—	• *M55D Seat Rear Vertical Motor - Driver (A2X+A45)* • *M55D Seat Rear Vertical Motor - Driver (A2X-A45)*
M55P	Seat Rear Vertical Motor - Passenger	—	In the passenger compartment, under the passenger seat	*Passenger Seat Components*	*M55P Seat Rear Vertical Motor - Passenger (A7K)*
M56D	Seat Recline Motor - Driver	—	In the passenger compartment, in the driver seat back	• *Driver Seat Components* • *Driver Seat Components*	• *M56D Seat Recline Motor - Driver (A2X+A45)* • *M56D Seat Recline Motor - Driver (A2X-A45)*
M56P	Seat Recline Motor - Passenger	—	In the passenger compartment, in the passenger seat back	*Passenger Seat Components*	• *M56P Seat Recline Motor - Passenger (A7K)* • *M56P Seat Recline Motor - Passenger (AK7)*
M6	Air Temperature Door Actuator	C4P/C67	In the passenger compartment, part of HVAC module, behind the instrument panel	—	*M6 Air Temperature Door Actuator (-CJ2)*
M63	Sliding Rear Window Motor	A48	In the passenger compartment, mounted to the passenger side of the rear wall, behind the rear seat	*Passenger Compartment - Right Rear (Extended Cab/Crew Cab)*	*M63 Sliding Rear Window Motor (A48)*
M64	Starter Motor	—	• (L3B) In the engine compartment, left rear, mounted to rear of engine block •	• *Engine Components - Left Front (L3B)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *M64 Starter Motor X1 (L3B)* • *M64 Starter Motor X1 (L82)* • *M64 Starter Motor X1 (L84/L87)* • *M64 Starter Motor X1 (LM2)* • *M64 Starter Motor X1 (LV3)* • *M64 Starter Motor X2*
M69	Sunroof Motor	CF5	In the passenger compartment, at the front of the roof, above the headliner	*Headliner Components*	*M69 Sunroof Motor (CF5)*
M6L	Air Temperature Door Actuator - Left	CJ2	In the passenger compartment, part of HVAC module, behind the instrument panel	—	*M6L Air Temperature Door Actuator - Left (CJ2)*
M6R	Air Temperature Door Actuator - Right	CJ2	In the passenger compartment, part of HVAC module, behind the instrument panel	—	*M6R Air Temperature Door Actuator - Right (CJ2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M7	Transmission Shift Lock Control Solenoid Actuator	—	In the passenger compartment, right side of the steering wheel, attached to transmission shift lever	—	—
M73A	Seat Blower Motor - Driver Back	KQV	In the passenger compartment, in the driver seat back	*Driver Seat Components*	*M73A Seat Blower Motor - Driver Back (KQV)*
M73B	Seat Blower Motor - Passenger Back	KQV	In the passenger compartment, in the passenger seat back	—	*M73B Seat Blower Motor - Passenger Back (KQV)*
M73C	Seat Blower Motor - Driver Cushion	KQV	In the passenger compartment, in the driver seat cushion	*Driver Seat Components*	*M73C Seat Blower Motor - Driver Cushion (KQV)*
M73D	Seat Blower Motor - Passenger Cushion	KQV	In the passenger compartment, in the passenger seat cushion	—	*M73D Seat Blower Motor - Passenger Cushion (KQV)*
M74D	Window Motor - Driver	—	In the passenger compartment, in the driver door	*Driver Door Components*	*M74D Window Motor - Driver (AXG)*
M74LR	Window Motor - Left Rear	Extended Cab/ Crew Cab	In the passenger compartment, in the left rear door	—	*M74LR Window Motor - Left Rear (AEQ)*
M74P	Window Motor - Passenger	—	In the passenger compartment, in the passenger door	*Passenger Door Components*	• *M74P Window Motor - Passenger (AED)* • *M74P Window Motor - Passenger (AEF)*
M74RR	Window Motor - Right Rear	Extended Cab/ Crew Cab	In the passenger compartment, in the right rear door	*Left Rear Door Components (Extended Cab/Crew Cab)*	*M74RR Window Motor - Right Rear (AEQ)*
M75	Windshield Wiper Motor	—	Outside the vehicle, at the left rear of the engine compartment, below the left lower corner of the windshield	*Engine Compartment Components - Top*	*M75 Windshield Wiper Motor*
M77D	Outside Rearview Mirror Motor - Driver	—	Outside the vehicle, at the front of the driver door, within the A9A Outside Rearview Mirror - Driver	—	—
M77P	Outside Rearview Mirror Motor - Passenger	—	Outside the vehicle, at the front of the passenger door, within the A9B Outside Rearview Mirror - Passenger	—	—
M78D	Outside Rearview Mirror Folding Motor - Driver	A45	Outside the vehicle, at the front of the driver door, within the A9A Outside Rearview Mirror - Driver	—	—
M78P	Outside Rearview Mirror Folding Motor - Passenger	A45	Outside the vehicle, at the front of the passenger door, within the A9B Outside Rearview Mirror - Passenger	—	—
M8	Blower Motor	—	In the passenger compartment, under the right side of the instrument panel, above the hush panel	—	—
M93	Key Capture Solenoid Actuator	-BTM	In the passenger compartment, left front, on the right side of the steering column, below the transmission shift lever	*Steering Column Components*	*M93 Key Capture Solenoid Actuator (-BTM)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M95L	Assist Step - Left	BRS	Under the vehicle, along the left frame rail, under the driver door	—	M95L Assist Step - Left (BRS)
M95R	Assist Step - Right	BRS	Under the vehicle, along the right frame rail, under the passenger door	—	M95R Assist Step - Right (BRS)
M96A	Active Grille Air Shutter 1 Actuator	VTI/WMI	At the front of the vehicle, center, attached to the inside of the front grille	—	M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)
M96B	Active Grille Air Shutter 2 Actuator	WMI	At the front of the vehicle, center, attached to the inside of the front grille	—	M96B Active Grille Air Shutter 2 Actuator (WMI)
P12	Horn	—	In the engine compartment, right front, at the bottom of the radiator core support	Engine Compartment Components - Top	P12 Horn
P16	Instrument Cluster	—	In the passenger compartment, in the driver side of the instrument panel	Instrument Panel - Front	• P16 Instrument Cluster X1 • P16 Instrument Cluster X2 (UV6)
P17	Info Display Module	—	In the passenger compartment, at the center of the instrument panel	Instrument Panel - Front	• P17 Info Display Module X1 (UIJ/UIK) • P17 Info Display Module X1 (UIR) • P17 Info Display Module X2 (UIJ/UIK) • P17 Info Display Module X2 (UIR)
P19AC	Speaker - Subwoofer	UQA	In the passenger compartment, front center, beneath floor console	—	P19AC Speaker - Subwoofer (UQA)
P19AG	Speaker - Left Front Door	—	In the passenger compartment, in the driver door	Driver Door Components	P19AG Speaker - Left Front Door
P19AH	Speaker - Right Front Door	—	In the passenger compartment, in the passenger door	Passenger Door Components	P19AH Speaker - Right Front Door (U95/UQF/UQA)
P19AL	Speaker - Left Rear Door	—	In the passenger compartment, in the left rear door	Right Rear Door Components (Extended Cab/Crew Cab)	P19AL Speaker - Left Rear Door (UQA/UQF)
P19AM	Speaker - Right Rear Door	—	In the passenger compartment, in the right rear door	Left Rear Door Components (Extended Cab/Crew Cab)	P19AM Speaker - Right Rear Door (UQF/UQA)
P19J	Speaker - Left Instrument Panel	—	In the passenger compartment, in the top of the left side of the instrument panel	Instrument Panel - Rear	• P19J Speaker - Left Instrument Panel (UQA) • P19J Speaker - Left Instrument Panel (UQF/U95)
P19W	Speaker - Right Instrument Panel	—	In the passenger compartment, in the top of the right side of the instrument panel	Instrument Panel - Rear	• P19W Speaker - Right Instrument Panel (UQA) • P19W Speaker - Right Instrument Panel (UQF/U95)
P29	Head-Up Display	UV6	In the passenger compartment, at the left side of the instrument panel, near the windshield	Instrument Panel - Front	• P29 Head-Up Display X1 (UV6) • P29 Head-Up Display X2 (UV6)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
P3	Backup Alarm	8S3	At the rear of the vehicle	—	*P3 Backup Alarm (8S3-U1D)*
P34D	Side Object Detection Indicator - Driver	UKC	Outside of the vehicle, left side, part of E17D Outside Rearview Mirror Glass - Driver, within A9A Outside Rearview Mirror - Driver	—	—
P34P	Side Object Detection Indicator - Passenger	UKC	Outside of the vehicle, left side, part of E17P Outside Rearview Mirror Glass - Passenger, within A9B Outside Rearview Mirror - Passenger	—	—
P43	Collision Alert Indicators	(UHX/UEU)-UV6	In the passenger compartment, in the top of the instrument panel, near the windshield, in front of the driver	*Instrument Panel - Rear*	*P43 Collision Alert Indicators ((UEU/UHX)-UV6)*
P45LR	Seat Haptic Movement Motor - Driver Left Rear	HS1	In the passenger compartment, in the left side of the driver seat cushion	—	*P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)*
P45RR	Seat Haptic Movement Motor - Driver Right Rear	HS1	In the passenger compartment, in the right side of the driver seat cushion	—	*P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)*
Q12	Evaporative Emission Purge Solenoid Valve	L3B/L82/L84/L87/LV3	(L82/L84/L87/LV3) In the engine compartment, front center, mounted to intake manifold, to the left of Q38 Throttle Body	• *Engine Components - Left (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	*Q12 Evaporative Emission Purge Solenoid Valve (L3B/L82/L84/L87/LV3)*
Q13	Evaporative Emission Vent Solenoid Valve	—	On the underbody, at the top left side of the fuel tank	—	*Q13 Evaporative Emission Vent Solenoid Valve (LM2)*
Q14A	Exhaust Gas Recirculation Valve 1	LM2	In the engine compartment, right rear, mounted to the exhaust, near the top right side of the engine	*Engine Components - Right Rear (LM2)*	*Q14A Exhaust Gas Recirculation Valve 1 (LM2)*
Q14B	Exhaust Gas Recirculation Valve 2	LM2	In the engine compartment, right rear lower, in the exhaust between the turbocharger and nitrogen oxides catalytic converter	*Engine Components - Right Rear (LM2)*	*Q14B Exhaust Gas Recirculation Valve 2 (LM2)*
Q17A	Fuel Injector 1	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 1 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 1 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 1	• *Engine Components - Left Rear (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17A Fuel Injector 1 (L3B)* • *Q17A Fuel Injector 1 (L82/L84/L87/LV3)* • *Q17A Fuel Injector 1 (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q17B	Fuel Injector 2	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 2 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 2 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 2	• Engine Components - Left Rear (L3B) • Engine Components - Top (LM2) • Engine Components - Top (LV3)	• Q17B Fuel Injector 2 (L3B) • Q17B Fuel Injector 2 (L82/L84/L87/LV3) • Q17B Fuel Injector 2 (LM2)
Q17C	Fuel Injector 3	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 3 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 3 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 3	• Engine Components - Left Rear (L3B) • Engine Components - Top (L82/L84/L87) • Engine Components - Top (L82/L84/L87) • Engine Components - Top (LM2) • Engine Components - Top (LV3)	• Q17C Fuel Injector 3 (L3B) • Q17C Fuel Injector 3 (L82/L84/L87/LV3) • Q17C Fuel Injector 3 (LM2)
Q17D	Fuel Injector 4	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 4 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 4 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 4	• Engine Components - Left Rear (L3B) • Engine Components - Top (L82/L84/L87) • Engine Components - Top (LM2) • Engine Components - Top (LV3)	• Q17D Fuel Injector 4 (L3B) • Q17D Fuel Injector 4 (L82/L84/L87/LV3) • Q17D Fuel Injector 4 (LM2)
Q17E	Fuel Injector 5	L82/L84/L87/LM2/LV3	• (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 5 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 5	• Engine Components - Top (L82/L84/L87) • Engine Components - Top (LM2) • Engine Components - Top (LV3)	• Q17E Fuel Injector 5 (L82/L84/L87/LV3) • Q17E Fuel Injector 5 (LM2)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q17F	Fuel Injector 6	L82/L84/L87/ LM2/LV3	• (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 6 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 6	• *Engine Components - Top (L82/ L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17F Fuel Injector 6 (L82/L84/ L87/LV3)* • *Q17F Fuel Injector 6 (LM2)*
Q17G	Fuel Injector 7	L82/L84/L87	• In the engine compartment, underneath intake manifold, next to cylinder 7 intake port on the cylinder head •	*Engine Components - Top (L82/L84/L87)*	*Q17G Fuel Injector 7 (L82/L84/L87)*
Q17H	Fuel Injector 8	L82/L84/L87	• In the engine compartment, underneath intake manifold, next to cylinder 8 intake port on the cylinder head •	*Engine Components - Top (L82/L84/L87)*	*Q17H Fuel Injector 8 (L82/L84/L87)*
Q18A	Fuel Pressure Regulator 1	LM2	In the engine compartment, left rear side of engine, below Q18C Fuel Pressure Regulator 3, attached to G18 High Pressure Fuel Pump	*Engine Components - Left Rear (LM2)*	*Q18A Fuel Pressure Regulator 1 (LM2)*
Q18B	Fuel Pressure Regulator 2	LM2	In the engine compartment, left side of engine, mounted to the left rear side of the valve cover	*Engine Components - Left Rear (LM2)*	*Q18B Fuel Pressure Regulator 2 (LM2)*
Q18C	Fuel Pressure Regulator 3	LM2	In the engine compartment, left rear side of engine, above Q18A Fuel Pressure Regulator 1, attached to G18 High Pressure Fuel Pump	*Engine Components - Left Rear (LM2)*	*Q18C Fuel Pressure Regulator 3 (LM2)*
Q2	A/C Compressor Clutch	—	In the engine compartment, left front, part of G1 A/C Compressor	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	*Q2 A/C Compressor Clutch*
Q20	Intake Air Flow Valve	LM2	In the engine compartment, left front, left of the valve cover	*Engine Components - Left Rear (LM2)*	*Q20 Intake Air Flow Valve (LM2)*
Q22	Intake Manifold Tuning Solenoid Valve	LM2	In the engine compartment, front center, attached to the front of the intake manifold	—	*Q22 Intake Manifold Tuning Solenoid Valve (LM2)*
Q27A	Pressure Control Solenoid Valve 1	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q27B	Pressure Control Solenoid Valve 2	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27C	Pressure Control Solenoid Valve 3	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27D	Pressure Control Solenoid Valve 4	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27E	Pressure Control Solenoid Valve 5	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q32A	Shift Solenoid Valve 1	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q32B	Shift Solenoid Valve 2	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q37LF	Shock Absorber Actuator - Left Front	Z45	Under the vehicle, left front, part of the left front shock absorber	Brake and Suspension Components	Q37LF Shock Absorber Actuator - Left Front (Z45)
Q37LR	Shock Absorber Actuator - Left Rear	Z45	Under the vehicle, left rear, part of the left rear shock absorber	Brake and Suspension Components	Q37LR Shock Absorber Actuator - Left Rear (Z45)
Q37RF	Shock Absorber Actuator - Right Front	Z45	Under the vehicle, right front, part of the right front shock absorber	Brake and Suspension Components	Q37RF Shock Absorber Actuator - Right Front (Z45)
Q37RR	Shock Absorber Actuator - Right Rear	Z45	Under the vehicle, right rear, part of the right rear shock absorber	Brake and Suspension Components	Q37RR Shock Absorber Actuator - Right Rear (Z45)
Q38	Throttle Body	-LM2	In the engine compartment, at the front of the engine, mounted to the intake manifold inlet	• Engine Components - Left Front (L3B) • Engine Components - Right (LV3) • Engine Components - Right Front (L82/L84/L87)	Q38 Throttle Body (L3B/L82/L84/L87/LV3)
Q39A	Torque Converter Clutch Pressure Control Solenoid Valve	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q40	Turbocharger Bypass Solenoid Valve	L3B	In the engine compartment, right side, mounted to the turbocharger compressor, beneath turbocharger compressor inlet	Engine Components - Right Front (L3B)	Q40 Turbocharger Bypass Solenoid Valve (L3B)
Q43	Valve Lifter Oil Manifold Assembly	LV3	In the engine compartment, front center, mounted in engine valley, below Q38 Throttle Body	Engine Components - Left (LV3)	Q43 Valve Lifter Oil Manifold Assembly (LV3)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q44	Engine Oil Pressure Control Solenoid Valve	—	In the engine compartment, at the front of the engine, behind the front cover	—	- Q44 Engine Oil Pressure Control Solenoid Valve (L3B) - Q44 Engine Oil Pressure Control Solenoid Valve (L87) - Q44 Engine Oil Pressure Control Solenoid Valve (LM2)
Q46	A/C Compressor Solenoid Valve	—	In the engine compartment, left front, part of G1 A/C Compressor	- Engine Components - Left Front (L3B) - Engine Components - Left Rear (LM2) - Engine Components - Right (LV3)	Q46 A/C Compressor Solenoid Valve
Q6	Camshaft Position Actuator Solenoid Valve	L82/L84/L87/LV3	In the engine compartment, front center, mounted to timing chain cover, above crankshaft harmonic balancer	Engine Components - Left Front (L82/L84/L87)	Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87/LV3)
Q61	Reductant Injector	LM2	In the engine compartment, right front, mounted to the exhaust, in front of diesel particulate filter	Engine Components - Right Rear (LM2)	Q61 Reductant Injector (LM2)
Q6E	Camshaft Position Actuator Solenoid Valve - Exhaust	L3B	In the engine compartment, front center, in front of exhaust camshaft	Engine Components - Left Front (L3B)	Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)
Q6F	Camshaft Position Actuator Solenoid Valve - Intake	L3B	In the engine compartment, front center, in front of intake camshaft	Engine Components - Left Front (L3B)	Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)
Q74	Engine Coolant Bypass Valve	L3B/LM2	In the engine compartment, left rear, attached to the bottom rear of Q97 Engine Coolant Flow Control Valve	- Engine Components - Left Front (L3B) - Engine Components - Left Rear (LM2)	- Q74 Engine Coolant Bypass Valve (L3B) - Q74 Engine Coolant Bypass Valve (LM2)
Q77A	Transmission Control Solenoid Valve 1	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	- Automatic Transmission Components - Valve Body (MQB) - Automatic Transmission Components - Valve Body (MQE)	- Q77A Transmission Control Solenoid Valve 1 (MQB) - Q77A Transmission Control Solenoid Valve 1 (MQE)
Q77B	Transmission Control Solenoid Valve 2	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	- Automatic Transmission Components - Valve Body (MQB) - Automatic Transmission Components - Valve Body (MQE)	- Q77B Transmission Control Solenoid Valve 2 (MQB) - Q77B Transmission Control Solenoid Valve 2 (MQE)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q77C	Transmission Control Solenoid Valve 3	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77C Transmission Control Solenoid Valve 3 (MQB) • Q77C Transmission Control Solenoid Valve 3 (MQE)
Q77D	Transmission Control Solenoid Valve 4	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77D Transmission Control Solenoid Valve 4 (MQB) • Q77D Transmission Control Solenoid Valve 4 (MQE)
Q77E	Transmission Control Solenoid Valve 5	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77E Transmission Control Solenoid Valve 5 (MQB) • Q77E Transmission Control Solenoid Valve 5 (MQE)
Q77F	Transmission Control Solenoid Valve 6	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77F Transmission Control Solenoid Valve 6 (MQB) • Q77F Transmission Control Solenoid Valve 6 (MQE)
Q77G	Transmission Control Solenoid Valve 7	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77G Transmission Control Solenoid Valve 7 (MQB) • Q77G Transmission Control Solenoid Valve 7 (MQE)
Q77H	Transmission Control Solenoid Valve 8	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77H Transmission Control Solenoid Valve 8 (MQB) • Q77H Transmission Control Solenoid Valve 8 (MQE)
Q77J	Transmission Control Solenoid Valve 9	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	• Automatic Transmission Components - Valve Body (MQB) • Automatic Transmission Components - Valve Body (MQE)	• Q77J Transmission Control Solenoid Valve 9 (MQB) • Q77J Transmission Control Solenoid Valve 9 (MQE)
Q8	Control Solenoid Valve Assembly	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	Automatic Transmission Components (MYC)	• Q8 Control Solenoid Valve Assembly X1 (MYC) • Q8 Control Solenoid Valve Assembly X2 (MYC)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q80L	Engine Mount Solenoid Valve - Left	L3B/LM2	In the engine compartment, front center, mounted to left side of the upper oil pan	Engine Components - Left Front (L3B)	Q80L Engine Mount Solenoid Valve - Left (LM2)
Q80R	Engine Mount Solenoid Valve - Right	L3B/LM2	In the engine compartment, front center, mounted to right side of the upper oil pan	Engine Components - Right Rear (L3B)	Q80R Engine Mount Solenoid Valve - Right (LM2)
Q83AA	Valve Lifter Oil Solenoid Valve - Cylinder 1	L82/L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 1	—	Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)
Q83AB	Valve Lifter Oil Solenoid Valve - Cylinder 2	L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 2	—	Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)
Q83AC	Valve Lifter Oil Solenoid Valve - Cylinder 3	L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 3	—	Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)
Q83AD	Valve Lifter Oil Solenoid Valve - Cylinder 4	L82/L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 4	—	Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)
Q83AE	Valve Lifter Oil Solenoid Valve - Cylinder 5	L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 5	—	Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)
Q83AF	Valve Lifter Oil Solenoid Valve - Cylinder 6	L82/L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 6	—	Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)
Q83AG	Valve Lifter Oil Solenoid Valve - Cylinder 7	L82/L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 7	—	Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)
Q83AH	Valve Lifter Oil Solenoid Valve - Cylinder 8	L84/L87	In the engine compartment, mounted to the engine, beneath the engine block valley cover, next to cylinder 8	—	Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)
Q97	Engine Coolant Flow Control Valve	L3B	In the engine compartment, left, attached to the front of Q97 Engine Coolant Flow Control Valve	• Engine Components - Left Front (L3B) • Engine Components - Left Rear (LM2)	—
Q97B	Engine Coolant Flow Control Valve - Block	LM2	In the engine compartment, left front, attached the front of Q97 Engine Coolant Flow Control Valve, at the top	• Engine Components - Left Front (L3B) • Engine Components - Left Rear (LM2)	• Q97B Engine Coolant Flow Control Valve - Block (L3B) • Q97B Engine Coolant Flow Control Valve - Block (LM2)
Q97M	Engine Coolant Flow Control Valve - Main	LM2	In the engine compartment, left front, attached to the front of Q97 Engine Coolant Flow Control Valve, behind the G13 Generator	Engine Components - Left Rear (LM2)	Q97M Engine Coolant Flow Control Valve - Main (LM2)
R6A	Terminating Resistor - High Speed Bus	—	Under the vehicle, near the left frame rail, above the spare tire, taped in the chassis harness	—	R6A Terminating Resistor - High Speed Bus

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
R6E	Terminating Resistor - High Speed Extension Bus 1	UEU/UHX	In the passenger compartment, right front, above headliner, near A9B Outside Rearview Mirror - Passenger	*Headliner Components*	*R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)*
R6F	Terminating Resistor - High Speed Extension Bus 2	—	In the passenger compartment, in the top of the right side of the instrument panel	—	*R6F Terminating Resistor - High Speed Extension Bus 2 ((IOS/IOT)-U1D-SUR)*
S126	Drive Mode Select Switch	URC	In the passenger compartment, left front, left side of the instrument panel, above S30 Headlamp Switch	*Instrument Panel - Front*	*S126 Drive Mode Select Switch (URC)*
S13D	Door Lock Switch - Driver	—	In the passenger compartment, in the driver door handle trim panel	*Driver Door Trim Components*	*S13D Door Lock Switch - Driver (AU3)*
S13P	Door Lock Switch - Passenger	—	In the passenger compartment, in the passenger door handle trim panel	*Passenger Door Trim Components*	*S13P Door Lock Switch - Passenger (AU3)*
S146	Window/Outside Rearview Mirror Switch - Driver	—	In the passenger compartment, left front, attached to driver door trim	*Driver Door Trim Components*	*S146 Window/Outside Rearview Mirror Switch - Driver*
S148L	Assist Step Kick Switch - Left	BRS	Under the vehicle, along the left frame rail, under the driver door part of the power assist step	—	*S148L Assist Step Kick Switch - Left (BRS)*
S148R	Assist Step Kick Switch - Right	BRS	Under the vehicle, along the right frame rail, under the passenger door part of the power assist step	—	*S148R Assist Step Kick Switch - Right (BRS)*
S157	Pickup Box Endgate Unlatch Switch	QT5	Outside of the vehicle, at the rear of the vehicle, on the endgate	*Endgate Components (QK2)*	*S157 Pickup Box Endgate Unlatch Switch (QT5)*
S159E	Pickup Box Endgate Control Switch - Exterior	QT6/QK2	Outside of the vehicle, at the rear of the vehicle, on the endgate	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *S159E Pickup Box Endgate Control Switch - Exterior (QK1+QT5)* • *S159E Pickup Box Endgate Control Switch - Exterior (QK2+QT5)*
S171L	Instrument Panel Center Accessory Function Switch - Left	—	In the passenger compartment, mounted to the instrument panel, beneath A26 HVAC Controls, left switch bank	*Instrument Panel - Front*	*S171L Instrument Panel Center Accessory Function Switch - Left*
S171R	Instrument Panel Center Accessory Function Switch - Right	—	In the passenger compartment, mounted to the instrument panel, beneath A26 HVAC Controls, right switch bank	*Instrument Panel - Front*	*S171R Instrument Panel Center Accessory Function Switch - Right*
S172	Auxiliary Multifunction Switch	9L7	In the passenger compartment, mounted to the instrument panel	—	*S172 Auxiliary Multifunction Switch (9L7)*
S2	Transmission Manual Shift Switch	—	In the passenger compartment, part of the transmission shift lever	*Steering Column Components*	*S2 Transmission Manual Shift Switch*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S27	Head-Up Display Switch	UV6	In the passenger compartment, left front, left of the steering column, in the instrument panel	*Instrument Panel - Front*	*S27 Head-Up Display Switch (UV6)*
S3	Transmission Shift Lever	—	In the passenger compartment, mounted to the steering column	—	*S3 Transmission Shift Lever*
S30	Headlamp Switch	—	In the passenger compartment, left of the steering column, in the instrument panel	*Instrument Panel - Front*	*S30 Headlamp Switch*
S32R	Seat Heating Switch - Rear	KA6	In the passenger compartment, center, on the rear of the floor console	*Floor Console Components*	*S32R Seat Heating Switch - Rear (D07 +KA6)*
S33	Horn Switch	—	In the passenger compartment, in the center of the steering wheel, behind the driver side air bag	—	*S33 Horn Switch*
S38	Ignition Mode Switch	BTM	In the passenger compartment, right of the steering column, in the instrument panel	*Instrument Panel - Front*	*S38 Ignition Mode Switch (BTM)*
S39	Ignition Switch	-BTM	In the passenger compartment, behind the steering wheel, on the right side of the steering column	*Steering Column Components*	*S39 Ignition Switch (-BTM)*
S47D	Seat Memory Switch - Driver	—	In the passenger compartment, on the driver door panel above the driver door switch assembly	*Driver Door Trim Components*	*S47D Seat Memory Switch - Driver (A45)*
S51	Telematics Button Assembly	UE1	In the passenger compartment, part of the inside rearview mirror	—	—
S52	Outside Rearview Mirror Switch	—	In the passenger compartment, on the driver door trim panel	—	—
S64D	Seat Adjuster Switch - Driver	—	In the passenger compartment, mounted to the outboard side of the driver seat cushion	*Driver Seat Components*	• *S64D Seat Adjuster Switch - Driver (A2X-A45)* • *S64D Seat Adjuster Switch - Driver (A45)*
S64P	Seat Adjuster Switch - Passenger	—	In the passenger compartment, mounted to the outboard side of the passenger seat cushion	*Passenger Seat Components*	*S64P Seat Adjuster Switch - Passenger (A7K)*
S65D	Seat Lumbar Support Switch - Driver	A2X	In the passenger compartment, mounted to the outboard side of the driver seat cushion	*Driver Seat Components*	*S65D Seat Lumbar Support Switch - Driver (A2X-A45)*
S65P	Seat Lumbar Support Switch - Passenger	A7K	In the passenger compartment, mounted to the outboard side of the passenger seat cushion	*Passenger Seat Components*	*S65P Seat Lumbar Support Switch - Passenger (A7K)*
S70E	Steering Wheel Controls Switch - Radio Presets	—	In the passenger compartment, on the left rear side of the steering wheel	—	*S70E Steering Wheel Controls Switch - Radio Presets (UK3)*
S70F	Steering Wheel Controls Switch - Radio Volume	—	In the passenger compartment, on the right rear side of the steering wheel	—	*S70F Steering Wheel Controls Switch - Radio Volume (UK3)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S70L	Steering Wheel Controls Switch - Left	—	In the passenger compartment, on the left side of the steering wheel	—	S70L Steering Wheel Controls Switch - Left
S70R	Steering Wheel Controls Switch - Right	—	In the passenger compartment, on the right side of the steering wheel	—	S70R Steering Wheel Controls Switch - Right
S76	Trailer Brake Control Switch	—	In the passenger compartment, center of the instrument panel, below S48C Multifunction Switch 1 - Instrument Panel	Instrument Panel - Front	S76 Trailer Brake Control Switch (JL1)
S78	Turn Signal/Multifunction Switch	—	In the passenger compartment, on the left side of the steering column	Steering Column Components	S78 Turn Signal/Multifunction Switch
S79D	Window Switch - Driver	—	In the passenger compartment, behind the driver door trim panel, center of the door	—	—
S79LR	Window Switch - Left Rear	—	In the passenger compartment, at the center of the left rear door, on the door trim panel	• Rear Door Trim Components (Extended Cab/Crew Cab) • Right Rear Door Components (Extended Cab/Crew Cab)	S79LR Window Switch - Left Rear (AEQ+(EXTENDED CAB/CREW CAB))
S79P	Window Switch - Passenger	—	In the passenger compartment, on the passenger door trim panel, center of the door	Passenger Door Trim Components	• S79P Window Switch - Passenger (AED) • S79P Window Switch - Passenger (AEF)
S79RR	Window Switch - Right Rear	—	In the passenger compartment, on the right rear door trim panel, center of the door	Rear Door Trim Components (Extended Cab/Crew Cab)	S79RR Window Switch - Right Rear (AEQ+(EXTENDED CAB/CREW CAB))
S86	Vehicle Stability Control Switch	—	In the passenger compartment, front center, attached to instrument panel, between S171L Instrument Panel Center Accessory Function Switch - Left and S171R Instrument Panel Center Accessory Function Switch - Right	Instrument Panel - Front	S86 Vehicle Stability Control Switch
T1	Accessory DC/AC Power Inverter Module	KI4/KI5	In the passenger compartment, rear center, mounted to the rear wall	• Passenger Compartment - Left Rear (Extended Cab/Crew Cab) • Passenger Compartment - Left Rear (Regular Cab)	• T1 Accessory DC/AC Power Inverter Module X1 (K14/K15) • T1 Accessory DC/AC Power Inverter Module X2 (K14/K15)
T10B	Keyless Entry Antenna - Instrument Panel Compartment	BTM	In the passenger compartment, front center, within instrument panel, in front of P17 Info Display Module	Instrument Panel - Rear	T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)
T10C	Keyless Entry Antenna - Left Front Door Handle	—	Outside of the vehicle, at the rear of the driver door, within A24D Door Handle Assembly - Driver Exterior	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T10D	Keyless Entry Antenna - Right Front Door Handle	—	Outside of the vehicle, at the rear of the passenger door, within A24P Door Handle Assembly - Passenger Exterior	—	—
T10E	Keyless Entry Antenna - Rear Compartment	BTM	At the rear of the vehicle, in front of the center of the rear bumper	Rear of Vehicle Components	T10E Keyless Entry Antenna - Rear Compartment
T10J	Keyless Entry Antenna - Center Console Front	—	In the passenger compartment, front center, beneath floor console or center seat.	—	T10J Keyless Entry Antenna - Center Console Front (BTM +D07)
T10V	Keyless Entry Antenna - Front Middle Seat	without D07	In the passenger compartment, front center, beneath the front middle seat	—	T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)
T12	Automatic Transmission Assembly	—	Under the vehicle, mounted to the rear of the engine	—	• T12 Automatic Transmission Assembly X1 (MQB) • T12 Automatic Transmission Assembly X2 (MQB) • T12 Automatic Transmission Assembly X3 (MQB)
T19	Power Supply Transformer	KL9	In the passenger compartment, right front, between the instrument panel and bulkhead	Behind Instrument Panel - Right	T19 Power Supply Transformer (KL9)
T22	Mobile Device Wireless Charger Module	K4C	In the passenger compartment, forward of center, in the floor console bin lid.	Floor Console Components	T22 Mobile Device Wireless Charger Module (K4C)
T3	Audio Amplifier	UQA	In the rear passenger compartment, mounted behind the rear seat, below the rear window	Passenger Compartment - Right Rear (Extended Cab/Crew Cab)	• T3 Audio Amplifier X1 (UQA) • T3 Audio Amplifier X2 (UQA) • T3 Audio Amplifier X3 (UQA) • T3 Audio Amplifier X4 (UQA)
T4G	Cellular Phone, Navigation, and Digital Radio Antenna	—	Outside the vehicle, at the front left of the roof	• Front of Vehicle Components (X88) • Front of Vehicle Components (Z88)	• T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1) • T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)
T4M	Radio Antenna	—	Outside the vehicle, at the right rear of the hood	• Front of Vehicle Components (X88) • Front of Vehicle Components (Z88)	T4M Radio Antenna
T4P	Navigation Antenna	(IOS/IOT)-UE1	Outside of the vehicle	—	T4P Navigation Antenna ((IOS/IOT)-UE1)
T4S	Wireless Communication Antenna - Bluetooth	—	Outside the vehicle, at the rear of the right front fender	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T4T	Wireless Communication Antenna - WLAN	IOS/IOT	In the passenger compartment, front center, within instrument panel, in front of the instrument panel compartment tray	—	T4T Wireless Communication Antenna - WLAN (IOS/IOT)
T8A	Ignition Coil 1	L3B/L82/L84/ L87/LV3	In the engine compartment, at the top of the engine, above cylinder 1	• Engine Components - Top (L3B) • Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	• T8A Ignition Coil 1 (L3B) • T8A Ignition Coil 1 (L82/L84/L87/ LV3)
T8B	Ignition Coil 2	L3B/L82/L84/ L87/LV3	In the engine compartment, at the top of the engine, above cylinder 2	• Engine Components - Top (L3B) • Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	• T8B Ignition Coil 2 (L3B) • T8B Ignition Coil 2 (L82/L84/L87/ LV3)
T8C	Ignition Coil 3	L3B/L82/L84/ L87/LV3	In the engine compartment, at the top of the engine, above cylinder 3	• Engine Components - Top (L3B) • Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	• T8C Ignition Coil 3 (L3B) • T8C Ignition Coil 3 (L82/L84/L87/ LV3)
T8D	Ignition Coil 4	L3B/L82/L84/ L87/LV3	In the engine compartment, at the top of the engine, above cylinder 4	• Engine Components - Top (L3B) • Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	• T8D Ignition Coil 4 (L3B) • T8D Ignition Coil 4 (L82/L84/L87/ LV3)
T8E	Ignition Coil 5	L82/L84/L87/ LV3	In the engine compartment, at the top of the engine, above cylinder 5	• Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	T8E Ignition Coil 5 (L82/L84/L87/LV3)
T8F	Ignition Coil 6	L82/L84/L87/ LV3	In the engine compartment, at the top of the engine, above cylinder 6	• Engine Components - Top (L82/ L84/L87) • Engine Components - Top (LV3)	T8F Ignition Coil 6 (L82/L84/L87/LV3)
T8G	Ignition Coil 7	L82/L84/L87	In the engine compartment, at the top of the engine, above cylinder 7	Engine Components - Top (L82/L84/L87)	T8G Ignition Coil 7 (L82/L84/L87)
T8H	Ignition Coil 8	L82/L84/L87	In the engine compartment, at the top of the engine, above cylinder 8	Engine Components - Top (L82/L84/L87)	T8H Ignition Coil 8 (L82/L84/L87)
W14	Blunt Cut - Emergency Vehicle Siren Provision	6J3	In the passenger compartment, within instrument panel	—	—
W24	Blunt Cut - Trailer Brakes Provision	Z82-JL1	In the passenger compartment, under left side of the instrument panel	—	—
W25	Blunt Cut - Configurable Provision	9L7	In the passenger compartment, under the instrument panel, left of the brake pedal	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
W30	Blunt Cut - Snow Plow	VYU	At the front of the vehicle, right front, between fascia and radiator core support, near X55SP Fuse Holder - Snow Plow	—	—
W4	Blunt Cut - Off-Road Grille Lamp Provision	6J3	In the passenger compartment, within instrument panel	—	—
X100	Front Bumper Harness to Body Harness	T3U/UD5	At the front of the vehicle, right front, near right lower side of radiator core support	*Front of Vehicle - Front Bumper Harness*	*X100 Front Bumper Harness to Body Harness (T3U/UD5)*
X109	Chassis Harness to Body Harness	UV2/UVB/UVI	Under the vehicle, in right front wheel well, near frame rail	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	*X109 Chassis Harness to Body Harness (UVB/UVI/UVN/UVS)*
X110	Body Harness to Left Headlamp Harness	—	In the engine compartment, at the rear of the left headlamp assembly	—	*X110 Body Harness to Left Headlamp Harness*
X111	Front Axle Harness to Engine Harness	NP0/NQH	Under the vehicle, near the front axle	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Left Rear (LM2)*	*X111 Front Axle Harness to Engine Harness (NPO/NQH)*
X115	Engine Harness to Body Harness	—	In the front of the engine compartment, near the upper left of the radiator support	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L3B)* • *Engine Compartment - Engine Harness - Left Front (L82)* • *Engine Compartment - Engine Harness - Left Front (LM2)* • *Engine Compartment - Engine Harness - Right Front (LM2)*	• *X115 Engine Harness to Body Harness (L3B)* • *X115 Engine Harness to Body Harness (L82)* • *X115 Engine Harness to Body Harness (L84/L87)* • *X115 Engine Harness to Body Harness (LM2)* • *X115 Engine Harness to Body Harness (LV3)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X120	Body Harness to Right Headlamp Harness	without S3U	In the engine compartment, at the rear of the right headlamp assembly	—	- X120 Fog Lamp Accessory Harness to Right Headlamp Harness (S3U) - X120 Fog Lamp Accessory Harness to Right Headlamp Harness (-S3U)
X120	Fog Lamp Accessory Harness to Right Headlamp Harness	S3U	In the engine compartment, at the rear of the right headlamp assembly	—	- X120 Fog Lamp Accessory Harness to Right Headlamp Harness (S3U) - X120 Fog Lamp Accessory Harness to Right Headlamp Harness (-S3U)
X121	Body Harness to Fog Lamp Accessory Harness	—	- (S3U) In the engine compartment, at the rear of the right headlamp assembly - (S3U) In the engine compartment, at the rear of the right headlamp assembly	—	X121 Body Harness to Fog Lamp Accessory Harness (S3U)
X127	Grille Frontview Camera Harness to Body Harness	UVI/UVS	At the front of the vehicle, right side, attached to the right side of radiator core support	Front of Vehicle - Grille Frontview Camera Harness (UVI/ UV2)	X127 Grille Frontview Camera Harness to Body Harness (UVS)
X129	Body COAX Harness to Chassis COAX Harness	UVS	Under the vehicle, in right front wheel well, near frame rail	—	X129 Body Coax Harness to Chassis Coax Harness (UVI/ UVN/UVS)
X130	Body COAX Harness to Chassis COAX Harness	UVS	Under the vehicle, in right front wheel well, near frame rail	—	X130 Body Coax Harness to Chassis Coax Harness (UVN/ UVS)
X132	Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness	VTI/WMI	At the front of the vehicle, left side of M96A Active Grille Air Shutter 1 Actuator, approximately half way down	- Engine Compartment - Engine Harness - Left Front (L3B) - Engine Compartment - Engine Harness - Left Front (LM2) - Engine Compartment - Engine Harness - Left Rear (LM2) - Engine Compartment - Engine Harness - Right Front (LM2)	X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)
X133	Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness	WMI	Under the vehicle, clipped to the steering gear	—	X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X136	Chassis Harness to Electronic Suspension Strut Extension Harness	Z45	In the engine compartment, left side, attached to the left frame rail, behind the left strut tower	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Electronic Suspension Strut Extension Harness*	*X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)*
X137	Chassis Harness to Electronic Suspension Strut Extension Harness	Z45	In the engine compartment, right side, attached to the right frame rail, behind the right strut tower	*Vehicle Underbody - Electronic Suspension Strut Extension Harness*	*X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)*
X138	Body Harness to Chassis Harness	—	In the rear of the engine compartment, left side, above left strut tower	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	• *X138 Body Harness to Chassis Harness (Crew Cab/Extended Cab)* • *X138 Body Harness to Chassis Harness (Regular Cab)*
X140	Chassis Harness to Body Harness	—	In the engine compartment, left side	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)*	*X140 Chassis Harness to Body Harness*
X143	DEF Jumper Harness to Chassis Harness	LM2	Under the vehicle, right side, in front of rear axle, at the front of the reductant tank	—	*X143 DEF Jumper Harness to Chassis Harness (LM2)*
X153	Engine Harness to Coolant Temperature Jumper Harness	LM2	In the engine compartment, near coolant temperature sensor	*Engine Compartment - Engine Harness - Left Rear (LM2)*	*X153 Engine Harness to Engine Coolant Temperature Sensor Harness (LM2)*
X154	Engine Harness to Camshaft Position Sensor Jumper Harness	L82/L84/L87/ LV3	In the engine compartment, near the fuel rail	• *Engine Compartment - Engine Harness - Left (LV3)* • *Engine Compartment - Engine Harness - Left Front (L82)*	*X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/L84/ L87/LV3)*
X155	Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness	L84/L87	In the engine compartment, at the intake manifold	—	*X155 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L84/L87)*
X156	Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness	L82/L84/L87	In the engine compartment, at the intake manifold	*Engine Compartment - Engine Harness - Left Front (L82)*	*X156 Engine Harness to Valve Lifter Oil Solenoid Valve - Cylinder Jumper Harness (L82/L84/L87)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X157	Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Solenoid Harness	L82/L84/L87	In the engine compartment, at the intake manifold	—	X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Solenoid Harness ((L82/L84/L87)-YK9)
X158	Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness	L82/L84/L87/LV3	At the left front of the engine compartment	Engine Compartment - Engine Harness - Left Front (L3B)	X158 Engine Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)
X158	Engine Harness to Engine Oil Control Solenoid Jumper Harness	L3B/LM2	At the left front of the engine compartment	Engine Compartment - Engine Harness - Left Front (L3B)	X158 Engine Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)
X160	Engine Harness to Fuel Injector Harness	—	• (L82/L84/L87/LV3) In the engine compartment, rear of the engine near the top center • (LM2) In the engine compartment, rear of the engine near the top center • (L3B) In the engine compartment, rear of the engine near the top center •	• Engine Compartment - Engine Harness - Left Front (L3B) • Engine Compartment - Engine Harness - Left Front (LM2) • Engine Compartment - Engine Harness - Right Front (LM2) • Engine Compartment - Engine Harness - Right Rear (L82) • Engine Compartment - Engine Harness - Right Rear (L84/L87) • Engine Compartment - Engine Harness - Top (LV3)	• X160 Engine Harness to Fuel Injector Harness (L3B) • X160 Engine Harness to Fuel Injector Harness (L82/L84/L87) • X160 Engine Harness to Fuel Injector Harness (LM2) • X160 Engine Harness to Fuel Injector Harness (LV3)
X161	Engine Harness to Fuel Injector Harness	L82/L84/L87/LV3	In the engine compartment, rear of the engine near the top right	• Engine Compartment - Engine Harness - Right Rear (L82) • Engine Compartment - Engine Harness - Right Rear (L84/L87) • Engine Compartment - Engine Harness - Top (LV3)	• X161 Engine Harness to Fuel Injector Harness (L82/L84/L87) • X161 Engine Harness to Fuel Injector Harness (LV3)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X171	Engine Harness to Chassis Harness	—	In the engine compartment, left front, near left front strut tower	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Regular Cab) • Engine Compartment - Engine Harness - Left (LV3) • Engine Compartment - Engine Harness - Left Front (L3B) • Engine Compartment - Engine Harness - Left Front (L82) • Engine Compartment - Engine Harness - Left Front (LM2) • Engine Compartment - Engine Harness - Right Front (LM2)	• X171 Engine Harness to Chassis Harness (L3B/ LM2) • X171 Engine Harness to Chassis Harness (L82/ L84/L87/LV3)
X172	Engine Harness to Glow Plug Jumper Harness	LM2	In the engine compartment, left front, above the G13 Generator	• Engine Compartment - Engine Harness - Left Front (LM2) • Engine Compartment - Engine Harness - Left Rear (LM2)	X172 Engine Harness to Glow Plug Jumper Harness (LM2)
X175	Engine Harness to Transmission Harness	MQE	Under the vehicle, at the rear of the T12 Automatic Transmission Assembly	Engine Compartment - Engine Harness - Right Rear (L3B)	X175 Engine Harness to Transmission Harness (MQE)
X176	Transmission Case Harness to Transmission Control Harness	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• X176 Transmission Case Harness to Transmission Control Harness (MQB) • X176 Transmission Case Harness to Transmission Control Harness (MQE)
X177	Transmission Case Harness to Speed Sensor Assembly Harness (MQE)| Transmission Range Control Harness to Transmission Control Harness (MQB)	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE) • X177 Transmission Control Extension Harness to Transmission Control Harness (MQB)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X182	Chassis Harness to Power Steering Jumper Harness	—	In the engine compartment, left front, above steering gear	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Regular Cab) • Engine Compartment - Power Steering Jumper Harnesses	X182 Chassis Harness to Power Steering Jumper Harness
X183	Power Steering Harness to Power Steering Jumper Harness	—	In the engine compartment, left front, above steering gear	Engine Compartment - Power Steering Jumper Harnesses	X183 Power Steering Harness to Power Steering Jumper Harness
X192	Engine Harness to Snow Plow Jumper Harness	VYU	In the engine compartment, left front, near top of G13 Generator	—	X192 Engine Harness to Snow Plow Jumper Harness (VYU)
X195	Upfitter Harness to Body Harness	6J3	In the engine compartment	—	X195 Body Harness to Upfitter Harness (6J3)
X205	Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness	—	In the passenger compartment, behind the right side of the instrument panel near the center	—	X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness
X209	Body Harness to Instrument Panel Harness	UVB	In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel	• Passenger Compartment - Body Harness - Right Front (Crew Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab) • Passenger Compartment - Body Harness - Right Front (Regular Cab) • Instrument Panel Harness	X209 Body Harness to Instrument Panel Harness (UVB/UVI/UVN/UVS)
X211	Instrument Panel Harness to Body Harness	—	In the passenger compartment, at the top right of the instrument panel, under the defroster duct trim	• Passenger Compartment - Body Harness - Right Front (Extended Cab) • Instrument Panel Harness	X211 Instrument Panel Harness to Body Harness (UQA)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X225	Instrument Panel Harness to Body Harness	—	In the passenger compartment, behind the lower left side of the instrument panel	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Left Front (Extended Cab) • Passenger Compartment - Body Harness - Left Front (Regular Cab) • Instrument Panel Harness	X225 Instrument Panel Harness to Body Harness
X241	Body Harness to Inverter Module Jumper Harness	KI4/KI5	In the passenger compartment, behind the middle of the instrument panel	• Passenger Compartment - Body Harness - Left Rear (Extended Cab/Crew Cab) • Passenger Compartment - Body Harness - Left Rear (Regular Cab)	X241 Body Harness to Inverter Module Jumper Harness (K14/K15)
X250	Electrical Auxiliary Heater Jumper Harness to Body Harness	C32	In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel	• Passenger Compartment - Body Harness - Right Front (Crew Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab)	X250 Electrical Auxiliary Heater Jumper Harness to Body Harness (C32)
X255	USB Receptacle Jumper Harness to Floor Console Harness	D07+(IOS/IOT)	In the passenger compartment, center, underneath the front of the floor console	Center Console - Floor Console Harness	X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)
X256	Headliner Harness to Instrument Panel Harness	—	In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel	• Roof - Headliner Harness (Regular Cab) • Roof - Headliner Harness (Extended Cab/Crew Cab) • Instrument Panel Harness	X256 Headliner Harness to Instrument Panel Harness
X260	Upfitter Harness to Instrument Panel Harness	Z82-JL1	In the passenger compartment, left front, within instrument panel, above X84 Data Link Connector	Instrument Panel Harness	• X260 Upfitter Harness to Instrument Panel Harness (9L7) • X260 Upfitter Harness to Instrument Panel Harness (Z82-JL1)
X261	Upfitter Harness to Upfitter Harness	9L7	In the passenger compartment, left front, within instrument panel, above X84 Data Link Connector	—	X261 Upfitter Harness to Upfitter Harness (9L7)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X272	Instrument Panel Harness to Upfitter Harness	6J3	In the passenger compartment, within the instrument panel	—	X272 Instrument Panel Harness to Upfitter Harness (6J3)
X273	Body Harness to Body Harness	6J4	In the passenger compartment, within instrument panel, near steering column	—	—
X275	Instrument Panel Harness to Body Harness	—	In the passenger compartment, behind the lower right side of the instrument panel	• Passenger Compartment - Body Harness - Right Front (Crew Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab) • Passenger Compartment - Body Harness - Right Front (Regular Cab) • Instrument Panel Harness	X275 Instrument Panel Harness to Body Harness
X310	Driver Seat Harness to Body Harness	—	In the passenger compartment, under the passenger seat	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Left Front (Extended Cab) • Passenger Compartment - Body Harness - Left Front (Regular Cab)	X310 Driver Seat Harness to Body Harness
X318	Sunroof Motor Harness to Headliner Harness	CF5	In the passenger compartment, in the headliner, between near the A-pillar	Roof - Headliner Harness (Extended Cab/ Crew Cab)	X318 Sunroof Motor Harness to Headliner Harness (CF5)
X320	Passenger Seat Harness to Body Harness	—	In the passenger compartment, under the passenger seat	• Passenger Compartment - Body Harness - Right Front (Crew Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab) • Passenger Compartment - Body Harness - Right Front (Regular Cab) • Passenger Compartment - Body Harness - Right Rear (Regular Cab)	X320 Passenger Seat Harness to Body Harness
X330	Body Harness to Center High Mounted Stop Lamp Harness	(UVI+UVN)/ UVS	In the passenger compartment, above the headliner, forward of E6 Center High Mounted Stop Lamp	—	X330 Body Harness to Center High Mounted Stop Lamp Harness (UVN)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X348	Body Harness to Floor Console Harness	without AZ3	In the passenger compartment, center, underneath the rear of the floor console	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab) • Passenger Compartment - Body Harness - Right Front (Regular Cab) • Center Console - Floor Console Harness	• X348 Body Harness to Floor Console Harness (-AZ3) • X348 Body Harness to Front Center Seat Harness (AZ3)
X348	Body Harness to Front Center Seat Harness	AZ3	In the passenger compartment, center, underneath the rear of the front center seat	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Right Front (Extended Cab) • Passenger Compartment - Body Harness - Right Front (Regular Cab) • Center Console - Floor Console Harness	• X348 Body Harness to Floor Console Harness (-AZ3) • X348 Body Harness to Front Center Seat Harness (AZ3)
X370	Body Harness to Rear Seat Harness	KA6	In the passenger compartment, left rear, at the rear wall, behind the rear seat	• Passenger Compartment - Body Harness - Left Rear (Extended Cab/Crew Cab) • Passenger Compartment - Rear Seat Harness (Extended Cab/Crew Cab)	X370 Body Harness to Rear Seat Harness (KA6)
X379	Headliner Harness to Inside Rearview Mirror Jumper Harness	DRZ	In the passenger compartment, at the rear of the headliner	—	X379 Inside Rearview Mirror Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)
X380	Center High Mount Stop Lamp Jumper Harness to Headliner Harness	Extended Cab/ Crew Cab	In the passenger compartment, behind the left C-pillar, near the headliner	Roof - Headliner Harness (Extended Cab/ Crew Cab)	X380 Center High Mount Stop Lamp Jumper Harness to Headliner Harness (9L7)
X381	Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness	DRZ	In the passenger compartment, at the rear of the headliner	—	X381 Inside Rearview Mirror Jumper Harness to Center High Mounted Stop Lamp Jumper Harness (DRZ)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X408	Left Side Assist Step Jumper Harness to Chassis Harness	BRS	Underneath the vehicle, along the outside of the left frame rail, beneath left rear door	—	X408 Left Side Assist Step Jumper Harness to Chassis Harness (BRS)
X410	Left Tail Lamp Harness to Chassis Harness	—	At the rear of the vehicle, left corner, underneath, on left frame rail	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	X410 Left Tail Lamp Harness to Chassis Harness
X415	Rear Axle Harness to Chassis Harness	—	Underneath the bed, attached to harness bracket mounted to the rear of frame cross rail, forward of rear axle	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Regular Cab) • Vehicle Underbody - Rear Chassis Extension Harness	X415 Rear Axle Harness to Chassis Harness
X418	Right Side Assist Step Jumper Harness to Chassis Harness	BRS	Underneath the vehicle, along the outside of the right frame rail, beneath right rear door	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	X418 Right Side Assist Step Jumper Harness to Chassis Harness (BRS)
X420	Right Tail Lamp Harness to Chassis Harness	—	At the rear of the vehicle, right corner, underneath, on right frame rail	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Regular Cab)	X420 Right Tail Lamp Harness to Chassis Harness
X436	Rear Axle Harness to Chassis Harness	-Z45	Underneath the bed, attached to harness bracket mounted to the rear of frame cross rail, forward of rear axle	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	• X436 Chassis Harness to Rear Axle Harness (Z45) • X436 Rear Axle Harness to Chassis Harness (-Z45)
X436	Chassis Harness to Rear Axle Harness	Z45	Underneath the bed, attached to harness bracket mounted to the rear of frame cross rail, forward of rear axle	Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)	• X436 Chassis Harness to Rear Axle Harness (Z45) • X436 Rear Axle Harness to Chassis Harness (-Z45)
X450	Power Inverter Module Jumper Harness to Chassis Harness	KC9/KCA	Underneath the rear of the vehicle, at the right rear corner	• Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab) • Vehicle Underbody - Chassis Harness (Regular Cab)	X450 Power Inverter Module Jumper Harness to Chassis Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X480	Chassis Harness to Back Up Alarm Harness	8S3	At the rear of the vehicle, in front of rear bumper, downstream from X88 Trailer Connector	—	X480 Chassis Harness to Back Up Alarm Harness (8S3)
X500	Driver Door Harness to Body Harness	—	In the passenger compartment, behind the left side of the instrument panel	• Passenger Compartment - Body Harness - Left Front (Crew Cab) • Passenger Compartment - Body Harness - Left Front (Extended Cab) • Passenger Compartment - Body Harness - Left Front (Regular Cab) • Doors - Driver and Passenger Door Harnesses	X500 Driver Door Harness to Body Harness
X505	Driver Door Harness to Driver Door Trim Harness	—	In the driver door, behind the driver door panel	• Doors - Driver and Passenger Door Harnesses • Doors - Driver and Passenger Door Trim Harnessses	X505 Driver Door Harness to Driver Door Trim Harness
X50A	Fuse Block - Underhood	—	In the engine compartment, right front, in front of C1 Battery	Engine Compartment Components - Top	• X50A Fuse Block - Underhood X1 • X50A Fuse Block - Underhood X2 • X50A Fuse Block - Underhood X3 (L3B) • X50A Fuse Block - Underhood X3 (L82) • X50A Fuse Block - Underhood X3 (L84/L87) • X50A Fuse Block - Underhood X3 (LM2) • X50A Fuse Block - Underhood X3 (LV3) • X50A Fuse Block - Underhood X4 • X50A Fuse Block - Underhood X5
X50B	Fuse Block - Underhood Auxiliary	LM2	In the engine compartment	—	X50B Fuse Block - Underhood Auxiliary Wire Entry (LM2)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X50D	Fuse Block - Battery	—	In the engine compartment, right front, on top of C1 Battery	Engine Compartment Components - Top	• X50D Fuse Block - Battery X1 • X50D Fuse Block - Battery X10 • X50D Fuse Block - Battery X2 • X50D Fuse Block - Battery X3 • X50D Fuse Block - Battery X4 (C32) • X50D Fuse Block - Battery X5 (LM2) • X50D Fuse Block - Battery X6 (L3B) • X50D Fuse Block - Battery X6 (LM2) • X50D Fuse Block - Battery X7 • X50D Fuse Block - Battery X8 • X50D Fuse Block - Battery X9
X510	Driver Door Harness to Driver Outside Rearview Mirror Harness	—	In the driver door, behind the driver door panel, near the A-pillar	Doors - Driver and Passenger Door Harnesses	X510 Driver Door Harness to Driver Outside Rearview Mirror Harness
X51B	Fuse Block - Instrument Panel Auxiliary	9L7	In the passenger compartment	—	X51B Fuse Block - Instrument Panel Auxiliary Wire Entry (9L7)
X51L	Fuse Block - Instrument Panel Left	—	In the passenger compartment, left side of the instrument panel, behind side trim panel	—	X51L Fuse Block - Instrument Panel Left Wire Entry
X51R	Fuse Block - Instrument Panel Right	—	In the passenger compartment, right side of the instrument panel, behind side trim panel	—	• X51R Fuse Block - Instrument Panel Right X1 (EXTENDED CAB/ CREW CAB) • X51R Fuse Block - Instrument Panel Right X1 (REGULAR CAB) • X51R Fuse Block - Instrument Panel Right X2 • X51R Fuse Block - Instrument Panel Right X3
X54	Fuse Block - Snow Plow	—	In the engine compartment	—	X54 Fuse Block - Snow Plow (VYU)
X55SP	Fuse Holder - Snow Plow	—	In the engine compartment	—	X55SP Fuse Holder - Snow Plow (VYU)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X600	Passenger Door Harness to Body Harness	—	In the passenger compartment, behind the right side of the instrument panel	• *Passenger Compartment - Body Harness - Right Front (Crew Cab)* • *Passenger Compartment - Body Harness - Right Front (Extended Cab)* • *Passenger Compartment - Body Harness - Right Front (Regular Cab)* • *Doors - Driver and Passenger Door Harnesses*	*X600 Passenger Door Harness to Body Harness*
X605	Passenger Door Harness to Passenger Door Trim Harness	—	In the passenger door, behind the passenger door panel	• *Doors - Driver and Passenger Door Harnesses* • *Doors - Driver and Passenger Door Trim Harnesssses*	*X605 Passenger Door Harness to Passenger Door Trim Harness*
X610	Passenger Door Harness to Passenger Outside Rearview Mirror Harness	—	In the passenger door, behind the passenger door panel, near the A-pillar	*Doors - Driver and Passenger Door Harnesses*	*X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness*
X700	Left Rear Door Harness to Body Harness	Extended Cab/ Crew Cab	In the passenger compartment, behind the left B-pillar, near the middle	• *Passenger Compartment - Body Harness - Left Front (Crew Cab)* • *Passenger Compartment - Body Harness - Left Front (Extended Cab)* • *Doors - Left Rear and Right Rear Door Harnesses (Crew Cab)* • *Doors - Left Rear and Right Rear Door Harnesses (Extended Cab)*	*X700 Left Rear Door Harness to Body Harness (EXTENDED CAB/CREW CAB)*
X800	Right Rear Door Harness to Body Harness	Extended Cab/ Crew Cab	In the passenger compartment, behind the right B-pillar, near the middle	• *Passenger Compartment - Body Harness - Right Front (Crew Cab)* • *Passenger Compartment - Body Harness - Right Front (Extended Cab)* • *Doors - Left Rear and Right Rear Door Harnesses (Crew Cab)* • *Doors - Left Rear and Right Rear Door Harnesses (Extended Cab)*	*X800 Right Rear Door Harness to Body Harness (EXTENDED CAB/ CREW CAB)*

Master Electrical Component List (cont'd)

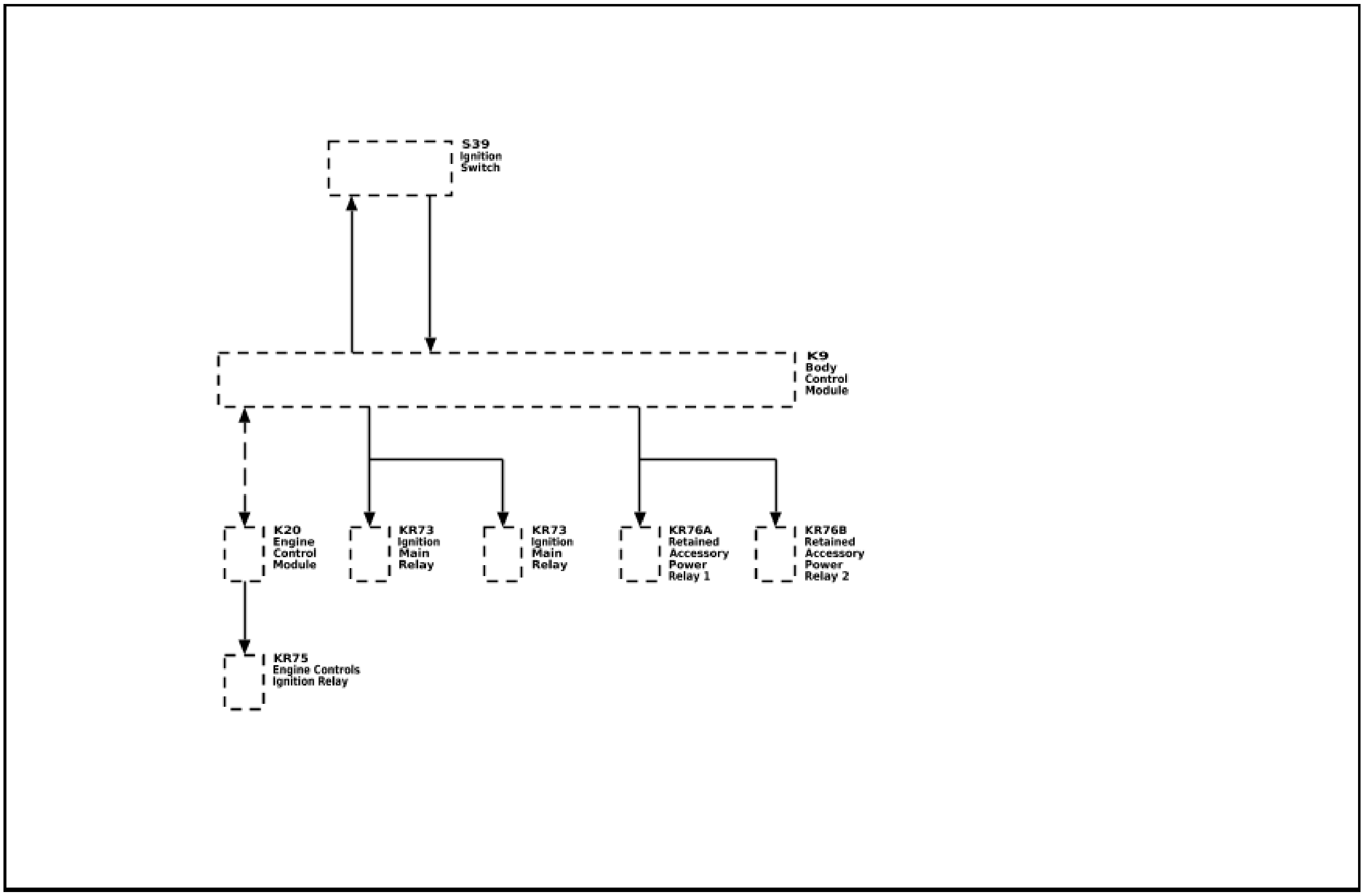
Code	Name	Option	Location	Locator View	Connector End View
X80C	Accessory Power Receptacle - Cargo	KC9/KCA	Outside of the vehicle, right rear corner of the truck bed	—	• *X80C Accessory Power Receptacle - Cargo (BOP)* • *X80C Accessory Power Receptacle - Cargo (KC9/ KCA)*
X80G	Accessory Power Receptacle - Instrument Panel	—	In the passenger compartment, front center, in the instrument panel, beneath A26 HVAC Controls	*Instrument Panel - Front*	*X80G Accessory Power Receptacle - Instrument Panel*
X80L	Accessory Power Receptacle - Center Console Rear	A50/D07	In the passenger compartment, center, on the rear of the floor console	*Floor Console Components*	*X80L Accessory Power Receptacle - Center Console Rear (A50/D07)*
X80M	Accessory Power Receptacle - Rear Seat	AZ3	In the passenger compartment, center, on the rear of the floor console	—	*X80M Accessory Power Receptacle - Rear Seat*
X81	Accessory Power Receptacle - 110V AC	KI4	In the passenger compartment, front center, attached to instrument panel, right of X80G Accessory Power Receptacle - Instrument Panel	*Instrument Panel - Front*	• *X81 Accessory Power Receptacle - 110V AC X1 (K14)* • *X81 Accessory Power Receptacle - 110V AC X2 (K14)*
X81B	Accessory Power Receptacle - 220V AC	KI5	In the passenger compartment, front center, attached to instrument panel, right of X80G Accessory Power Receptacle - Instrument Panel	*Instrument Panel - Front*	• *X81B Accessory Power Receptacle - 220V AC X1 (K15)* • *X81B Accessory Power Receptacle - 220V AC X1 (KI5)* • *X81B Accessory Power Receptacle - 220V AC X2 (K15)* • *X81B Accessory Power Receptacle - 220V AC X2 (KI5)*
X83	Auxiliary Audio Input	—	In the passenger compartment, in the center console storage compartment	*Floor Console Components*	• *X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)* • *X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)*
X84	Data Link Connector	—	In the passenger compartment, at the bottom of the driver side of the instrument panel	*Instrument Panel - Front*	*X84 Data Link Connector*
X85	Steering Wheel Air Bag Coil	—	In the passenger compartment, behind the steering wheel	*Steering Column Components*	• *X85 Steering Wheel Air Bag Coil X1* • *X85 Steering Wheel Air Bag Coil X2*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X88	Trailer Connector	—	On the vehicle exterior, at the rear of the vehicle, left of the license plate	*Rear of Vehicle Components*	• *X88 Trailer Connector X1 (U1D)* • *X88 Trailer Connector X1 (UY2/Z6A)* • *X88 Trailer Connector X2 (UVI/UVS)* • *X88 Trailer Connector X3 (UVS)*
X901	Rear Bumper Harness to Chassis Harness	—	On the vehicle underbody, behind rear bumper, near the left frame rail	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)* • *Rear of Vehicle - Rear Bumper Harness*	*X901 Rear Bumper Harness to Chassis Harness*
X909	Endgate Harness to Chassis Harness	UV2/UVB/UVI	Under the vehicle, rear, left of the spare tire	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)* • *Rear of Vehicle - Endgate Harness (QK2)*	*X909 Liftgate Harness to Chassis Harness (UVB/UVI/UVN/UVS)*
X92	USB Receptacle	—	In the passenger compartment, front center, in the instrument panel, beneath A26 HVAC Controls	*Instrument Panel - Front*	• *X92 USB Receptacle X1* • *X92 USB Receptacle X2* • *X92 USB Receptacle X3 (D07+(IOS/IOT))*
X926	Endgate Harness to Chassis Harness	QK2/QT5	Under the vehicle, near the left lower side of the endgate	• *Vehicle Underbody - Chassis Harness (Extended Cab/Crew Cab)* • *Vehicle Underbody - Chassis Harness (Regular Cab)* • *Rear of Vehicle - Endgate Harness (QK2)*	• *X926 Endgate Harness to Chassis Harness (-5N5)* • *X926 Rearview Camera Harness to Chassis Harness (5N5)*
X92B	USB Receptacle - Rear Seat	D07/AZ3	In the passenger compartment, center, on the rear of the floor console	—	*X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)*
X92C	USB Receptacle - Center Console Rear	D07/AZ3	In the passenger compartment, center, on the rear of the floor console	*Floor Console Components*	*X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))*

Description and Operation

Power Mode Description and Operation (Without BTM and/or ATH/ATS)


S39
Ignition
Switch
K9
Body
Control
Module
K20
Engine
Control
Module
KR73
Ignition
Main
Relay
KR73
Ignition
Main
Relay
KR76A
Retained
Accessory
Power
Relay 1
KR76B
Retained
Accessory
Power
Relay 2
KR75
Engine Controls
Ignition Relay

3282831

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master. This vehicles power mode master is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle’s body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is useful to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition switch signals to the power mode master for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The power mode master will also activate relays and other direct outputs of the power mode master as needed. The power mode master determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the power mode serial data message does not match what the individual module can see from its own connections.

The power mode master receives ignition switch signals to identify the operators desired power mode. The Power Mode Parameter tables below illustrate the correct state of these input parameters (circuits) in correspondence to the ignition switch position:

Power Mode Parameters

Ignition Switch Position	Power Mode Transmitted	Ign. Off/Run/Crank (Off/Run Crank Voltage Circuit)	Ignition Accessory/Run (Accessory Voltage Circuit)	Ignition Run/Crank (Ignition 1 Voltage Circuit)
Off Key Out	Off	Key Out / ACC	Inactive	Inactive
Off Key IN	Off	Key In / Off	Inactive	Inactive
Accessory	Accessory	Key Out / ACC	Active	Inactive
Run	Run	Run	Active	Active
Start	Crank Request	Crank	Inactive	Active

Relay Controlled Power Mode

The BCM uses the discrete ignition switch inputs Off/Run/Crank Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay 1 and retained accessory power relay 2 remain on for a timed period after the Ignition key is removed. Refer to *Retained Accessory Power Description and Operation on page 7-1222* for more information on the retained accessory power function.

Transport Mode

Transport mode reduces the parasitic load of some modules during vehicle shipping and/or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When a vehicle is in transport/storage, some features may be disabled or have reduced functionality while enabled, such as keyless entry, afterblow, and content theft features.

Transport mode is initiated by turning on the hazard flashers, applying the brake pedal, and then turning and holding the ignition key to the start position with the brake pedal applied for greater than 15 s. The mode is disengaged by repeating the previous process. The driver information center (if equipped) will temporarily display Transport Mode is On when it enables and Transport Mode is OFF when it disables. For vehicles not equipped with a driver information center, the battery indicator light will constantly flash on the Instrument Cluster when enabled. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.

BCM Awake/Sleep States

The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

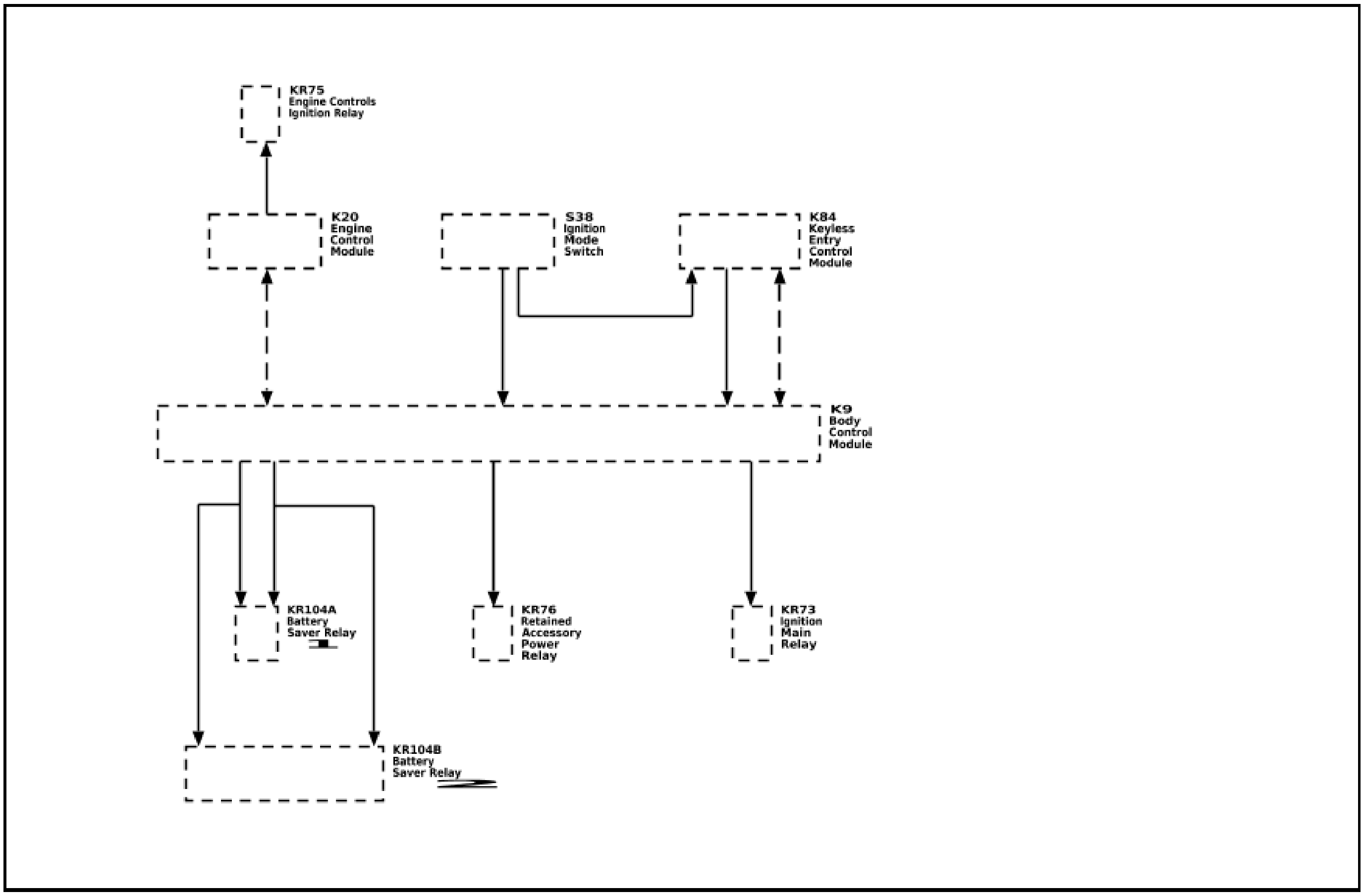
- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- The ignition switch is OFF, key out.
- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

Power Mode Description and Operation (BTM and/or ATH/ATS)


KR75
Engine Controls
Ignition Relay
K20
Engine
Control
Module
S38
Ignition
Mode
Switch
K84
Keyless
Entry
Control
Module
K9
Body
Control
Module
KR104A
Battery
Saver Relay
KR76
Retained
Accessory
Power
Relay
KR73
Ignition
Main
Relay
KR104B
Battery
Saver Relay

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Serial Data Power Mode Master

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master. This vehicles power mode master is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle’s body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is useful to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition mode switch is a low current switch with a discrete ignition signal to the power mode master for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The power mode master will also activate relays and other direct outputs of the power mode master as needed. The power mode master determines which power mode (Off, Accessory, Run/Start) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the power mode serial data message does not match what the individual module can see from its own connections.

The power mode master receives ignition mode switch signals to identify the operators desired power mode. The Power Mode Parameter table below illustrates the correct state of these input parameters in correspondence to the ignition mode switch with the transmitter to vehicle range:

Power Mode Parameters

Power Mode	Power Mode Transmitted	Push Button Ignition Switch (Power Button Switch Circuit Input to the BCM)	Push Button Ignition Switch Voltage Push Button Ignition Switch Voltage Input to the BCM	Key in Cylinder Switch/Key Fob in Vehicle (Transmitter in Range to the BCM Signal)
Transmitter in Range	Off	Inactive	9 V	Yes
Transmitter out of Range	Off	Inactive	9 V	No
Vehicle On Power Mode, then Press the Power Button Switch (Foot on or off the Brake Pedal) Transmitter in Vehicle	Off	Active (pushed) / Inactive (not pushed)	1.2–2.9 V (Pressed) 3.34–4.26 V (Released)	Yes
Vehicle Off Power Mode, then Press the Power Button Switch with foot off the Brake Pedal; Transmitter in Vehicle	Accessory Mode	Active (pushed) / Inactive (not pushed)	1.2–2.9 V (Pressed) 3.34–4.26 V (Released)	Yes
Vehicle Off Power Mode, then Press the Power Button Switch with foot on the Brake Pedal; Transmitter in Vehicle	Vehicle in Run/Start Mode (Ignition ON engine running.)	Active (pushed) / Inactive (not pushed)	1.2–2.9 V (Pressed) 3.34–4.26 V (Released)	Yes
Vehicle OFF Power Mode, then Press and Hold the Power Button Switch for 5 s with foot OFF the Brake Pedal; Transmitter in Vehicle	Vehicle in Run/Start Mode (Ignition ON without the engine running)	Active (pushed) / Inactive (not pushed)	1.2–2.9 V (Pressed) 3.34–4.26 V (Released)	Yes
Vehicle OFF Power Mode, then Press and Hold the Power Button Switch for 10 s with foot OFF the Brake Pedal; Transmitter in Vehicle	Vehicle In Service Mode (Ignition ON without the engine running)	Active (pushed) / Inactive (not pushed)	1.2–2.9 V (Pressed) 3.34–4.26 V (Released)	Yes

Relay Controlled Power Mode

The BCM uses discrete push button switch inputs, transmitter in range status, current power mode state, and brake pedal position state to distinguish the correct power mode (Off, Accessory Mode, Vehicle in Run/Start Mode). The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay remains on for a timed period after the Ignition key is removed. Refer to *Retained Accessory Power Description and Operation on page 7-1222* for more information on the retained accessory power function.

Push Button Start

The S38 Ignition Mode Switch has two LEDs that indicate the vehicle power mode. When the vehicle is in the Off ignition mode, both LEDs will be off.

With the vehicle in the OFF ignition mode, momentarily pressing and releasing the S38 Ignition Mode Switch with the brake pedal not pressed the vehicle will enter into the Accessory ignition mode and the amber LED will illuminate. The Accessory mode has a predetermined time-out to prevent battery drain. For details, refer “Ignition Positions” in the vehicle owner manual.

With the vehicle in the OFF ignition mode, pressing and holding the S38 Ignition Mode Switch for greater than 10 s with the brake pedal not pressed the vehicle will enter into Service Mode ignition mode and the green LED will illuminate. In this mode, the vehicle will be in the Run ignition mode without the engine running. Service Mode is used for vehicle service and diagnostics that does not required the engine to be running. Service Mode will remain on until the vehicle is manually turned OFF by pressing and releasing the S38 Ignition Mode Switch. There is not battery run-down protection and leaving the vehicle in Service Mode may result is a depleted battery.

With the vehicle in the OFF ignition mode, momentarily pressing and releasing the S38 Ignition Mode Switch with the brake pedal pressed the vehicle will start and the green LED will illuminate. Upon engine starting, the vehicle will remain in the Run ignition mode. If the vehicle is left in PARK with the engine running, the vehicle will automatically turn off after a predetermined amount of time. This time will vary depending if the keyless entry transmitter was left in the vehicle. For details, refer “Extended Parking” in the vehicle owner manual.

With the vehicle in any ignition mode except Off, momentarily pressing and releasing the S38 Ignition Mode Switch the vehicle will enter the Off ignition mode.

Both LED’s have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the passive entry passive start module (PEPS) and to the BCM. The PEPS module sends a redundant signal to the BCM with the ignition mode switch status.

Transport Mode (If Equipped)

Transport mode reduces the parasitic load of some modules during vehicle shipment and/or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When a vehicle is in transport/storage, some features may be disabled or have reduced functionality while in this mode, such as disabling the Remote Function Actuator or content theft features. Transport mode is initiated by turning on the hazard flashers, applying the brake pedal, and then pushing and holding the ignition mode switch with the brake pedal pressed for greater than 15 s. The mode is disengaged by repeating the previous process. The DIC (if equipped) will momentarily display Transport Mode is On when it is enabled and Transport Mode is Off when it is disabled. For vehicles not equipped with a DIC, the battery indicator light will constantly flash on the Instrument Cluster when Transport mode is enabled. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.

Transport mode utilizes a latching relay that when enabled disconnects some modules from their ignition power or memory power sources. When enabled and the vehicle is switched OFF, the BCM sends a momentary command to unlatch the relay disconnecting power up to 1 min after RAP is inactive. Every time the vehicle is switched ON the BCM will send a momentary command to latch the relay. This allows the use of all features when the ignition is ON. The BCM will send another command to unlatch the relay once the vehicle is switched OFF and RAP is inactive.

BCM Awake/Sleep States

The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

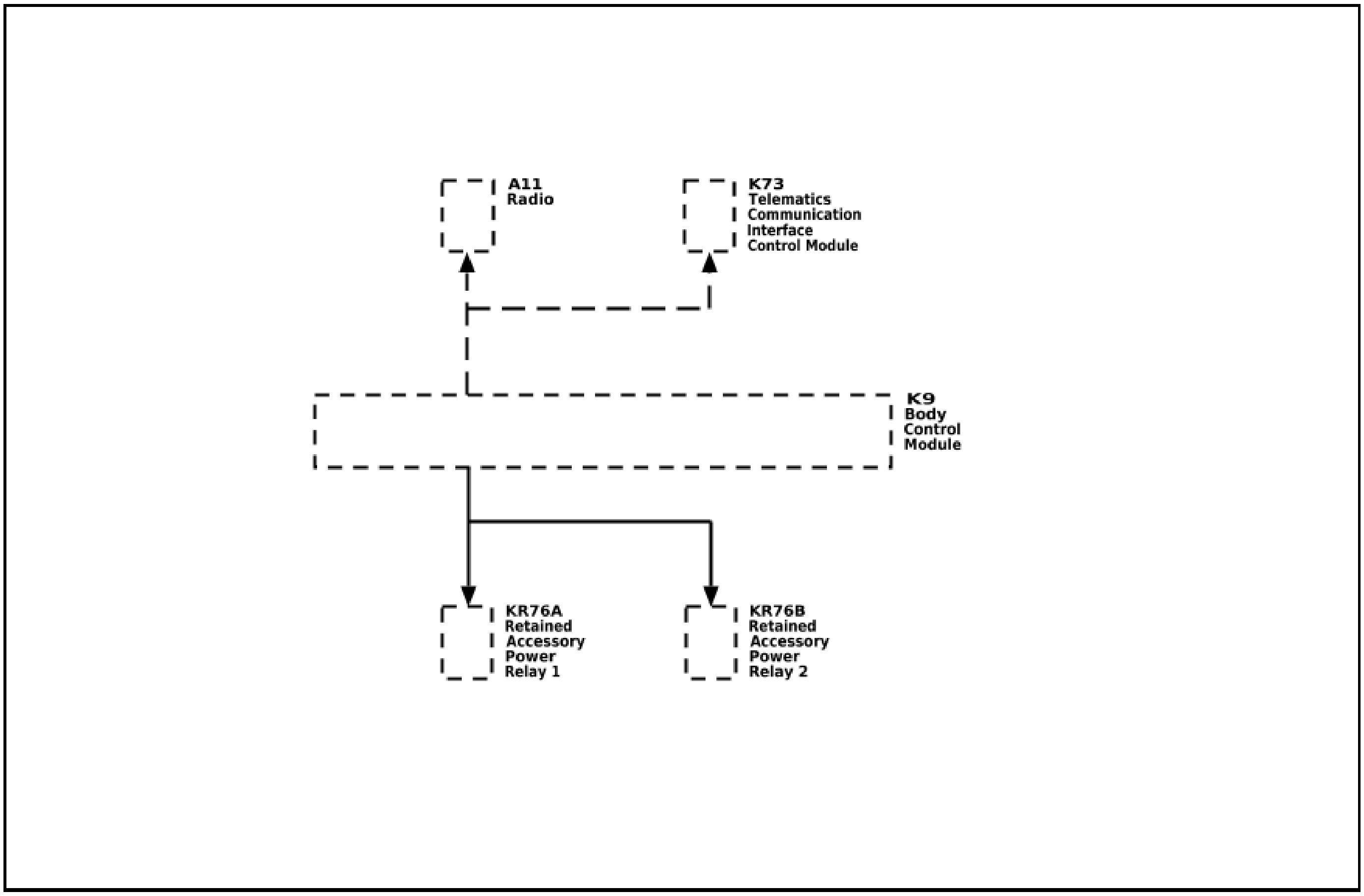
- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- The ignition switch is OFF, key out.
- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

Retained Accessory Power Description and Operation



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The body control module (BCM) monitors the ignition switch position, battery condition, and each door ajar/open switch status to determine whether the retained accessory power should be initiated or terminated. Retained accessory power is controlled by two different methods; relay control and serial data. Some modules receive a retained accessory power message from the BCM over the serial data circuits. Serial data controlled retained accessory power is deactivated as required by their modules retained accessory power mode operation. Other subsystems are activated directly by the BCM through a relay. Components and systems that are active in retained accessory power are also activated anytime the ignition is any position other than OFF regardless of the door switch signals.

Relay Controlled Retained Accessory Power

The BCM keeps the retained accessory power relay 1 and retained accessory power relay 2 energized during all power modes, except Off-Awake and Crank. The retained accessory power relay 1 and retained accessory power relay 2 are also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened.

Relay controlled retained accessory power will end when one of the following conditions is met:

- The BCM receives an input from any door ajar or open switch indicating the opening of any door after the ignition key is out of the ignition.

  Note: If the BCM is receiving any door ajar or open signal from those switches when the ignition key is turned OFF, retained accessory power will not initiate.

- The BCM internal timer for the retained accessory power expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

Systems powered by the retained accessory power relay 1 and retained accessory power relay 2 during the retained accessory power mode are as follows:

Note: The vehicle may not be equipped with all components as listed below.

- Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Sunroof Control Module
- Sunroof Switch
- Sliding Rear Window Switch
- Mobile Device Wireless Charger Module

Serial Data Controlled Retained Accessory Power

Retained accessory power systems controlled by serial data are as follows:

Radio

Radio retained accessory power activation / termination is the same as relay operation with one exception; the only door switch that will turn off the radio during retained accessory power is the driver door open switch.

Vehicle Communication Interface Module (VCIM) (Onstar®) (If Equipped)

VCIM RAP activation/termination is the same as radio operation with 1 exception; if there is an active call when the ignition key is turned off the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

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Section 8

Safety and Security

Immobilizer 8-3
  Schematic and Routing Diagrams 8-3
    Immobilizer Schematics 8-4
  Description and Operation 8-5
    Immobilizer Description and Operation 8-5

Remote Functions 8-7
  Schematic and Routing Diagrams 8-7
    Remote Function Schematics 8-8
  Description and Operation 8-12
    Garage Door Opener Description and Operation 8-12
    Keyless Entry System Description and Operation 8-12

Supplemental Restraints 8-15
  Schematic and Routing Diagrams 8-15
    SIR Schematics 8-16
  Description and Operation 8-20
    Supplemental Inflatable Restraint System Description and Operation 8-20

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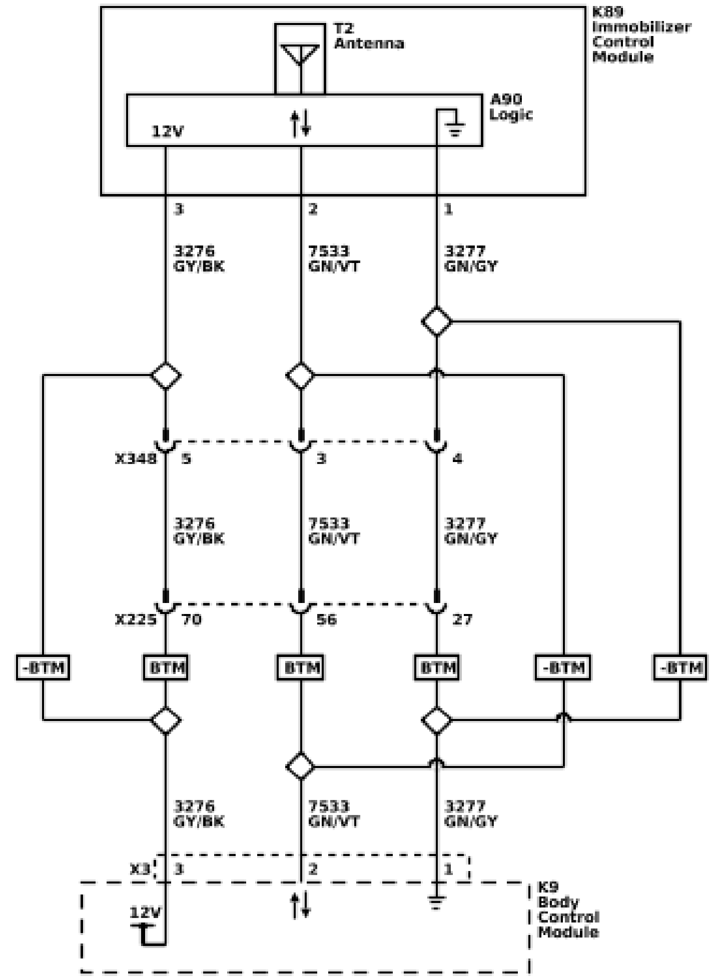
Immobilizer

Schematic and Routing Diagrams

Immobilizer Schematics (Immobilizer)


K89
Immobilizer
Control
Module
T2
Antenna
A90
Logic
12V
3
2
1
3276
GY/BK
7533
GN/VT
3277
GN/GY
X348
5
3
4
3276
GY/BK
7533
GN/VT
3277
GN/GY
X225
70
56
27
-BTM
BTM
BTM
BTM
-BTM
-BTM
3276
GY/BK
7533
GN/VT
3277
GN/GY
X3
3
2
1
12V
K9
Body
Control
Module

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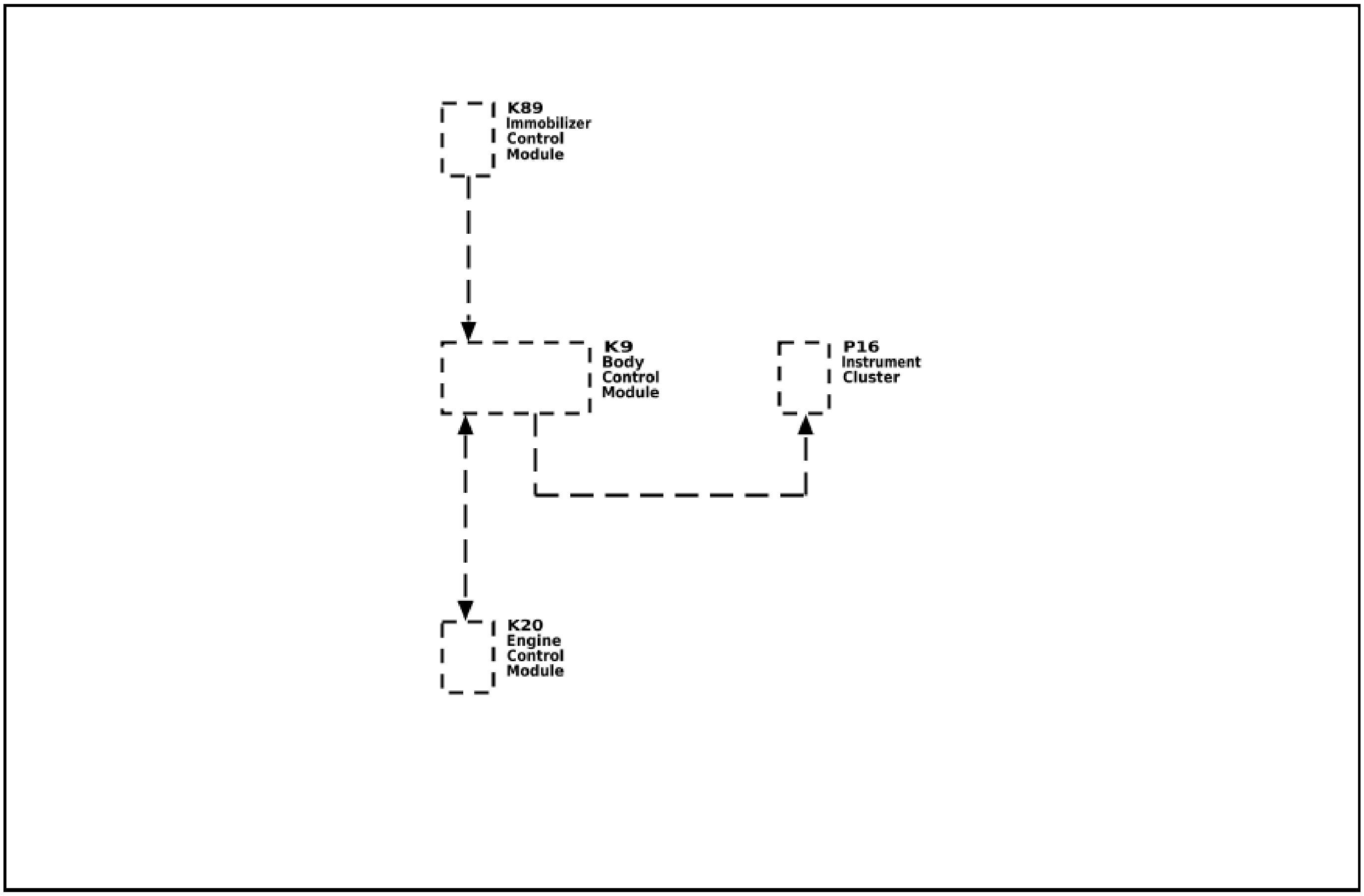
Description and Operation

Immobilizer Description and Operation



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The immobilizer system functions are provided by the body control module (BCM) and the engine control module (ECM), as well as any control modules which store and report the environment identifier.

When an ignition key is inserted into the ignition lock cylinder and the ignition is switched ON, the transponder in the key is energized by the immobilizer coil surrounding the ignition lock cylinder. This immobilizer coil is part of the immobilizer control module. The transponder transmits a signal that contains its unique value, which is received by the BCM through the immobilizer coil. The BCM then compares this value to a value stored in memory. The BCM also monitors various control modules to determine if the stored environment identifiers match.

If both the environment identifier and the value received from the transponder match, the BCM will send the prerelease password via serial data to the ECM. If the encrypted code's unique value is incorrect or the environment identifier does not match, the BCM will send the start disable message to the ECM which will prevent the vehicle starter and fuel pump from operating.

When the ECM receives the BCM prerelease password, the ECM will challenge the password. The ECM sends this challenge to the BCM via serial data. Both the ECM and BCM perform a calculation on this challenge. If the BCM calculated response to the challenge equals the calculation performed by the ECM, the ECM will allow vehicle starting.

The components of the theft system are as follows:

- BCM
- ECM
- Immobilizer control module
- Steering column lock control module, if equipped
- Ignition key
- Security indicator
- Various control modules which store and report the environment identifier

Body Control Module (BCM)

The immobilizer system is an integral part of the BCM and is controlled internally within the BCM. The BCM can learn up to 8 keys (transponder values).

The BCM uses the following inputs:

- Environment identifier exchange with various modules
- Encrypted code from the vehicle key, received by the immobilizer control module

The BCM uses the following outputs:

- Prerelease password communication with ECM
- Challenge/response with ECM

When an ignition key is inserted into the ignition lock cylinder and the ignition is switched ON, the encrypted code in the key is energized by the immobilizer control module surrounding the ignition lock cylinder. The energized transponder transmits a signal that contains its unique value, which is received by the BCM. The BCM then compares this value to the learned key code stored in memory. The BCM then performs one of the following functions:

- If the encrypted code value matches the values stored in the BCM memory, the BCM will send the prerelease password to the ECM via serial data.
- If the encrypted code unique value does not match the value stored in the BCM, the BCM will send the start disable message to the ECM via serial data.
- If the BCM is unable to measure the ignition key encrypted code value, the BCM will not send any messages to the ECM.

Engine Control Module (ECM)

When the ECM receives the BCM prerelease password, the ECM will challenge the password. The ECM sends this challenge to the BCM via the serial data circuit. Both the ECM and BCM perform a calculation on this challenge. If the calculated response from the BCM equals the calculation performed by the ECM, the ECM will allow vehicle starting.

The ECM will disable vehicle starting if any of the following immobilization conditions occur:

- The prerelease password is invalid.
- The start disable password is sent by the BCM.
- No passwords are received. There is no communication with the BCM.
- The BCM calculated response to the challenge does not equal the calculation performed by the ECM.

Immobilizer Control Module

The immobilizer control module contains an immobilizer coil which surrounds the ignition cylinder. The coil passively powers the transponder located in the ignition key when the key is in the ignition. When powered, the key transmits its unique value to the immobilizer control module, which is then relayed to the BCM via a discrete serial data circuit. The immobilizer control module also receives B+ and ground from the BCM.

The immobilizer control module is used to:

1. Learn keys
2. To start the vehicle

Steering Column Lock Control Module

On vehicles with electronic steering column lock that use a steering column lock control module the immobilizer system will prevent vehicle starting if there is a fault or no communication with the steering column lock control module.

Ignition Key

Each ignition key contains a transponder with a unique encrypted value. The transponder's encrypted value is fixed and unable to be changed. The immobilizer system uses the ignition key transponder value to determine if a valid ignition key is being used to start the vehicle.

Environment Identifier

Various modules throughout the vehicle learn a specific environment identifier during the module programming process. The environment identifier is learned by each individual module and matches the environment identifier stored in the BCM. Prior to starting after a battery disconnect, each of the modules which store a environment identifier will compare their identifier to that of the identifier stored in the BCM. If all the identifiers match, the engine starting process will continue. If the environment identifiers do not match, engine starting will be disabled.

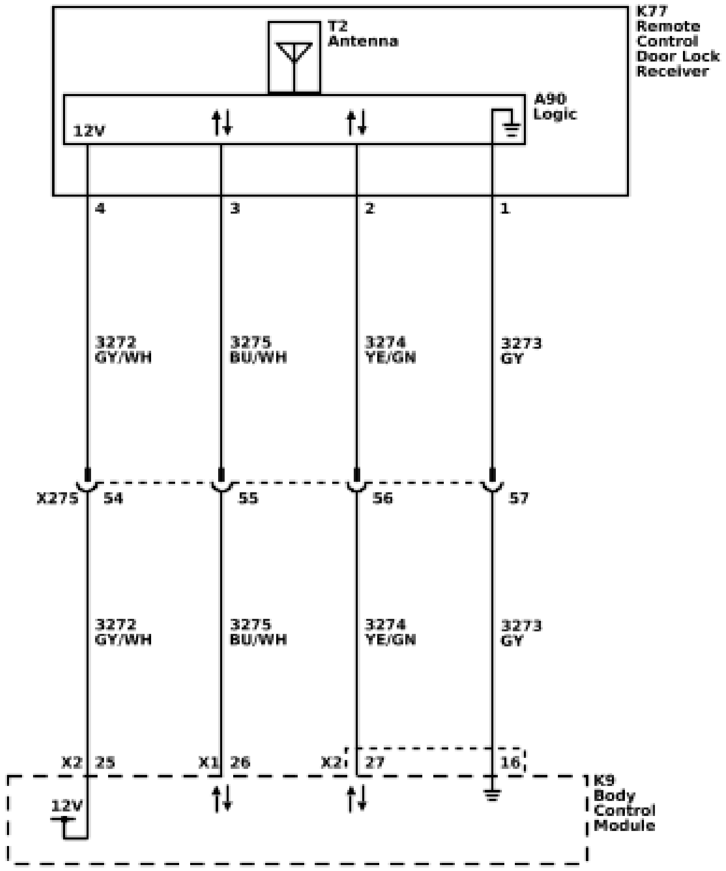
Security Indicator

The BCM will command the instrument cluster to illuminate the security indicator when the ignition is in the ON position to indicate a fault has occurred within the immobilizer system and when the engine starting is disabled.

Remote Functions

Schematic and Routing Diagrams

Remote Function Schematics (Keyless Entry - Active)


K77
Remote
Control
Door Lock
Receiver
T2
Antenna
A90
Logic
12V
4
3
2
1
3272
GY/WH
3275
BU/WH
3274
YE/GN
3273
GY
X275
54
55
56
57
3272
GY/WH
3275
BU/WH
3274
YE/GN
3273
GY
X2
25
X1
26
X2
27
16
12V
K9
Body
Control
Module

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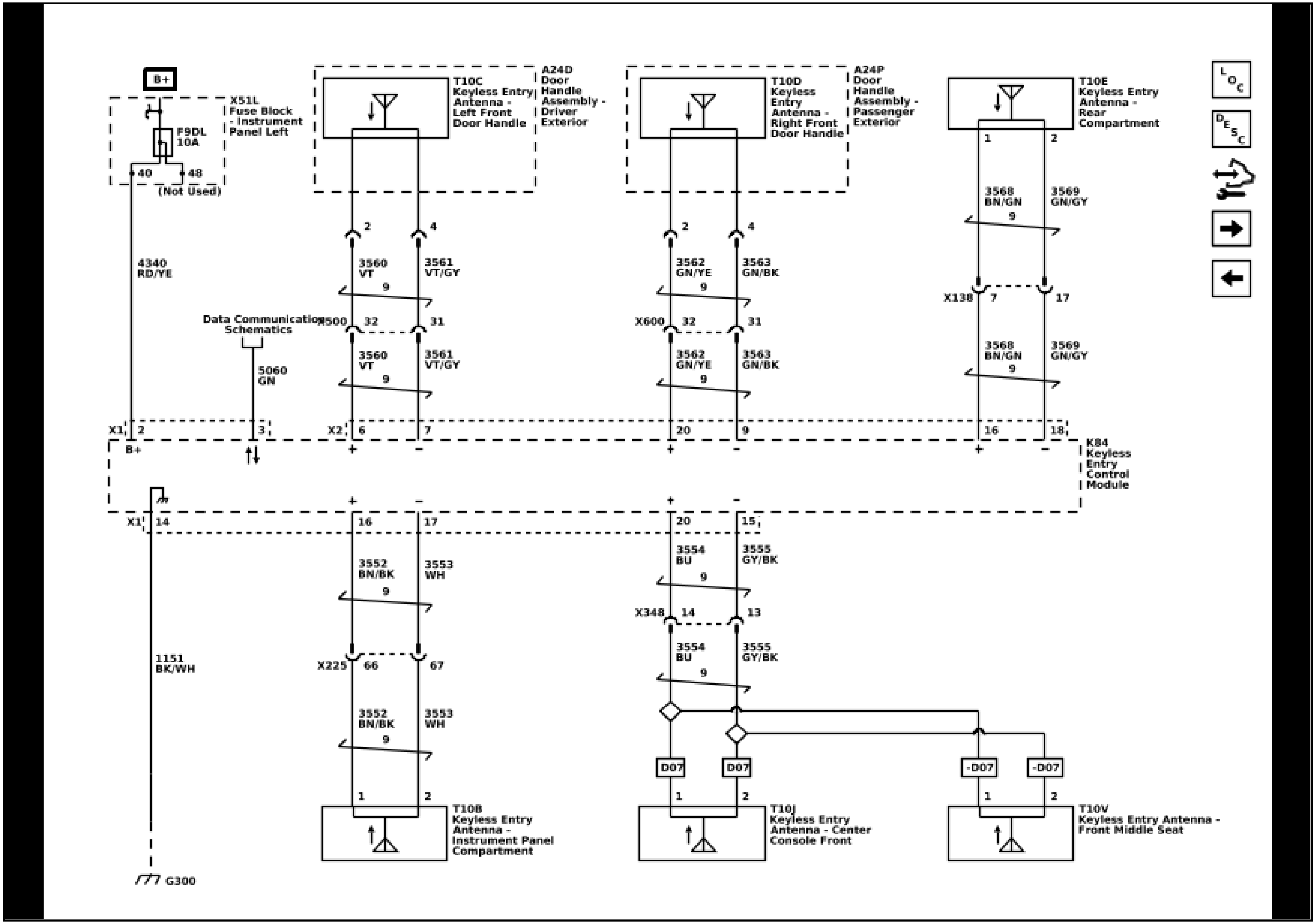
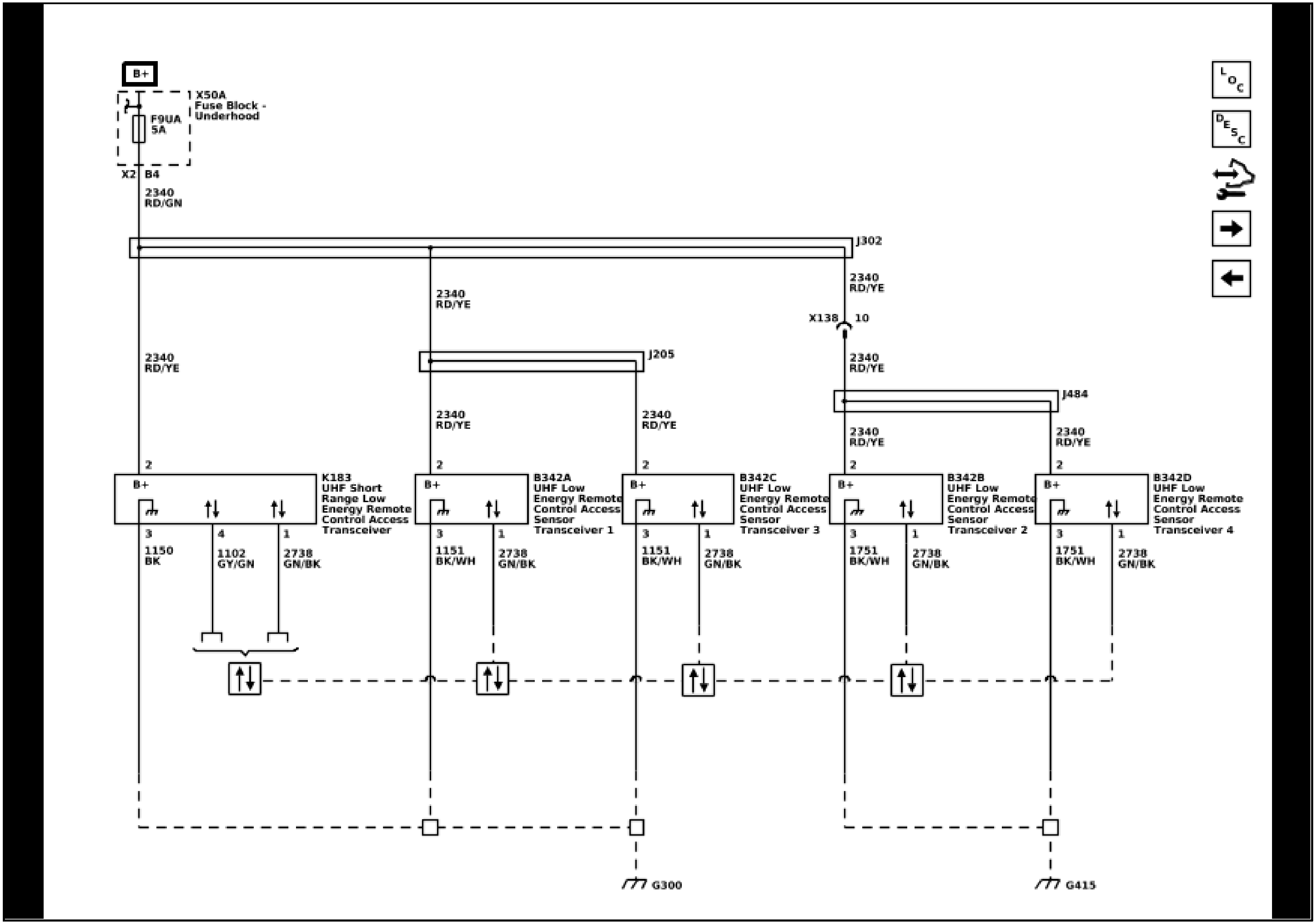
Remote Function Schematics (Keyless Entry - Passive and Keyless Start)


B+
X51L
Fuse Block
- Instrument
Panel Left
F9DL
10A
40
48
(Not Used)
4340
RD/YE
Data Communication
Schematics
5060
GN
T10C
Keyless Entry
Antenna -
Left Front
Door Handle
A24D
Door
Handle
Assembly -
Driver
Exterior
2
4
3560
VT
3561
VT/GY
9
X500
32
31
T10D
Keyless
Entry
Antenna -
Right Front
Door Handle
A24P
Door
Handle
Assembly -
Passenger
Exterior
3562
GN/YE
3563
GN/BK
X600
T10E
Keyless Entry
Antenna -
Rear
Compartment
1
2
3568
BN/GN
3569
GN/GY
X138
7
17
X1
2
3
X2
6
7
20
9
16
18
B+
+
–
K84
Keyless
Entry
Control
Module
X1
14
16
17
20
15
3552
BN/BK
3553
WH
3554
BU
3555
GY/BK
X348
14
13
1151
BK/WH
X225
66
67
D07
-D07
T10B
Keyless Entry
Antenna -
Instrument Panel
Compartment
T10J
Keyless Entry
Antenna - Center
Console Front
T10V
Keyless Entry Antenna -
Front Middle Seat
G300
5502281

Remote Function Schematics (Keyless Entry - Virtual Key (BOP))


B+
X50A
Fuse Block -
Underhood
F9UA
5A
X2 B4
2340
RD/GN
J302
2340
RD/YE
X138 10
J205
J484
2
B+
3
4
1
K183
UHF Short
Range Low
Energy Remote
Control Access
Transceiver
1150
BK
1102
GY/GN
2738
GN/BK
B342A
UHF Low
Energy Remote
Control Access
Sensor
Transceiver 1
1151
BK/WH
B342C
UHF Low
Energy Remote
Control Access
Sensor
Transceiver 3
B342B
UHF Low
Energy Remote
Control Access
Sensor
Transceiver 2
1751
BK/WH
B342D
UHF Low
Energy Remote
Control Access
Sensor
Transceiver 4
G300
G415

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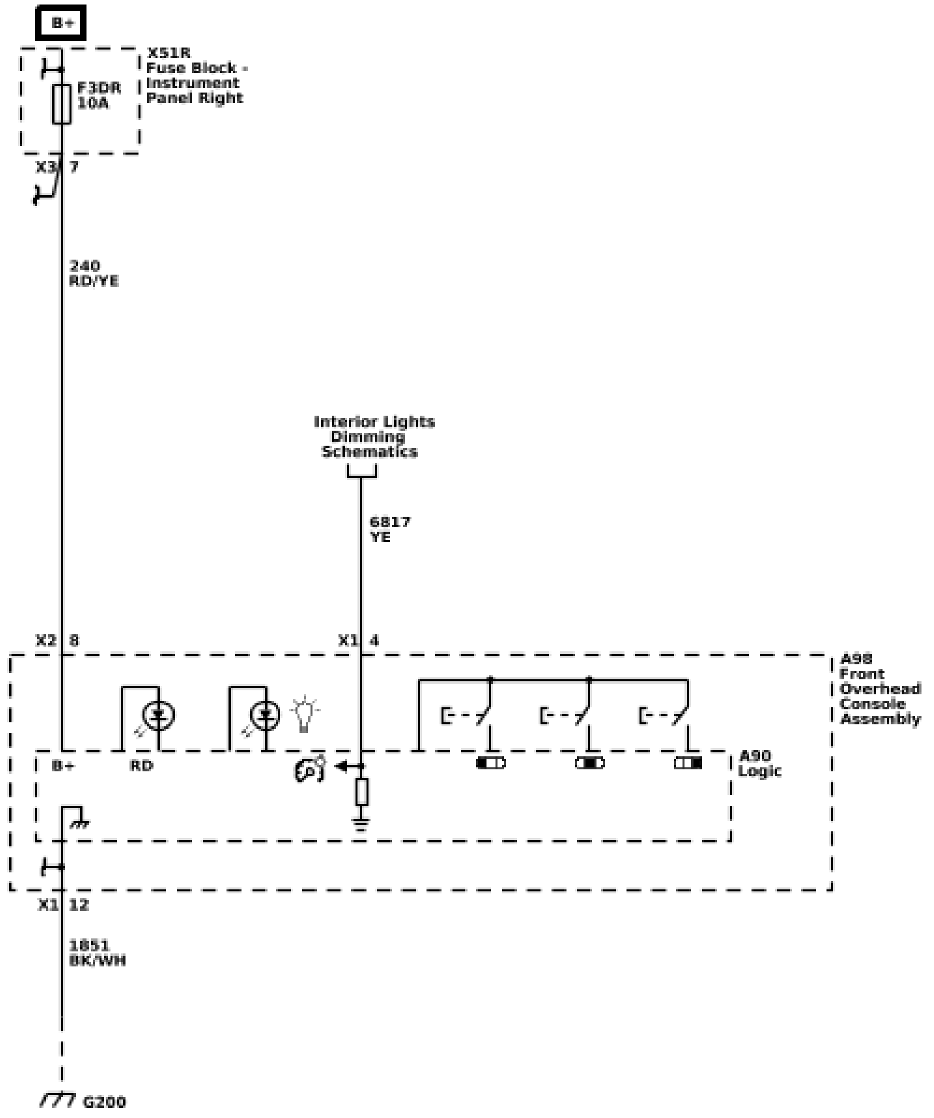
Remote Function Schematics (Garage Door Opener (UG1))


B+
X51R
Fuse Block - Instrument Panel Right
F3DR
10A
X3 7
240
RD/YE
Interior Lights Dimming Schematics
6817
YE
X2 8
X1 4
A98
Front
Overhead
Console
Assembly
B+
RD
A90
Logic
X1 12
1851
BK/WH
G200

5502283

Description and Operation

Garage Door Opener Description and Operation

The garage door opener is fixed and rolling code capable. Rolling code is a system that allows the code that the customers receiver receives from the garage door opener to change every time the garage door opener is used within operating range of the receiver. Rolling code programming requires the customer to push a learn/program button on the garage door opener receiver at their home. This button is usually located on the receiver unit under a cover (light cover) on one end of the unit. The customer must follow the garage door opener manufacturers instructions to program/learn the receiver to accept the Universal Home Remote System as an authorized opener for their unit . When the receiver and the garage door opener are initially programmed together, a code is established and a new code is created for every new transmission. The software in the receiver recognizes the garage door opener and accepts the new code.

The garage door opener is compatible with most, but not all types and brands of transmitters.

The garage door opener is a transmitter operating between 288–434 MHz. The power and range of the transmitter is limited to comply with laws governing the generation of radio frequency interference. The transmitter is programmed by the user to accept the signal generated by the user's transmitters.

The garage door opener has 3 buttons that may be programmed for individual transmitter/receiver combinations to control up to 3 garage door openers, security gates, lighting systems, etc. Each button represents a transmitter code section of the transmitter, which operates separately from any other button, and may be considered a separate transmitter. Operation consists of simply pressing a button to activate the corresponding transmitter.

The garage door opener does not need any programming after it is replaced. However, for the opener function it must be programmed to the customer’s garage door or other devices such as a gate. The programming can only be performed at the device being programmed, it cannot be programmed at a service facility. Instructions for programming are listed in the Garage Door Opener Malfunction document in a Diagnostic Aid.

Note: Do not use the garage door opener (GDO) with any garage door opener that does not have the stop and reverse safety feature. This includes any garage door opener model manufactured before April 1, 1982.

Keyless Entry System Description and Operation

The keyless entry system is a vehicle entry device. The keyless entry system is used in conjunction with the door locks to unlock the vehicle. Keyless entry will lock/unlock the vehicle doors or open the rear compartment lid when a corresponding button on the keyless entry transmitter is pressed. This is accomplished by the transmitter sending a radio frequency to the remote control door lock receiver antenna that has a direct link to the body control module (BCM). The BCM interprets the signal and activates the requested function or request the appropriate control module to activate the function via a serial data message. A low transmitter battery or radio frequency interference from aftermarket devices, such as 2-way radios, power inverters, computers, etc., may cause a system malfunction. High radio frequency traffic areas, such as gas stations that use pay-at-the-pump radio frequency transponders, may also cause interference that could lead to a malfunction. Keyless entry allows you to operate the following features:

- Door lock/unlock
- Liftgate lock/unlock, if equipped
- Trunk release, if equipped
- Power liftgate, if equipped
- Panic alarm/vehicle locator
- Remote vehicle starting, if equipped

The keyless entry system has the following components:

- Keyless entry transmitters
- Body control module
- Remote control door lock receiver

Keyless Entry Transmitters

Note: When the vehicle key is in the ignition, keyless entry functions from all keyless entry transmitter are disabled.

The keyless entry transmitters are used to perform various entry functions while away from the immediate are of the vehicle. Keyless entry functions may work at up to 20 m (65 ft) away from the vehicle. Ambient conditions may affect the performance of the keyless entry transmitter and reduce the range at which keyless entry functions operate. Up to eight transmitters may be programmed to a single vehicle. The keyless entry transmitter is an integral part of the vehicle key.

OnStar® Remote Link (if equipped)

A vehicle operator may have the ability to perform some of the keyless entry functions using applications on personal devices such as a smart phone. Unwanted or inadvertent door lock/unlock activation may be requested by the OnStar® Remote Link application. It is possible that a customer may be unaware of account usage, resulting in an unwanted or phantom door lock/unlock. If normal system diagnosis results in an inability to verify the customer’s concern, contact Technical Assistance Center (TAC).

Body Control Module (BCM)

The BCM is a multifunction module that operates the keyless entry system. When a radio frequency message is received from a keyless entry transmitter, the BCM interprets this signal and performs the specific function, i.e. door lock, door unlock, or vehicle locate.

Remote Control Door Lock Receiver

The remote control door lock receiver acts as an antenna for the keyless entry system and communicates with the BCM through a dedicated serial data link. When a button is pressed on a keyless entry transmitter, the remote control door lock receiver receives this signal and sends the request to the BCM. The BCM interprets the signal and performs the specific function, i.e. door lock, door unlock, or vehicle locate.

Unlock Doors

Momentarily press the transmitter UNLOCK button in order to perform the following functions:

- Unlock only the driver door or all doors and liftgate (if equipped); this is customized through the driver information center.
- Illuminate the interior lamps for a determined length of time or until the ignition is turned ON.
- Flash the exterior lights; this is customized through the driver information center.
- Disarm the content theft deterrent system, if equipped.
- Deactivate the content theft deterrent system when in the alarm mode.

Lock All Doors

Press the transmitter LOCK button to perform the following functions:

- Lock all vehicle doors.
- Immediately turn OFF the interior lamps.
- Flash the exterior lights and/or sound the horn; this is customized through the driver information center.
- Arm the content theft deterrent system.

Trunk Release, if equipped

Press the trunk release button on the transmitter to open the trunk.

Power Liftgate, if equipped

Press and hold the power liftgate button to perform the following functions:

- Open or close the liftgate using the power liftgate function.
- Flash the tail lamps.
- Sound the interior power liftgate chime.

Vehicle Locator/Panic Alarm

A single press of the panic button performs the following functions. Some functions may be dependent on personalization settings:

- Pulse the horn three times.
- Flash the exterior lamps three times.

A press and hold of the panic button performs the following functions:

- Illuminate the interior lamps.
- Pulse the horn and flash the exterior lamps for 30 seconds or until the following conditions occur:
  - The panic button is pressed.
  - The ignition switch is turned to the RUN position with a valid key.

Remote Vehicle Start, if equipped

The remote vehicle start function allows engine starting while not in the vehicle. It also allows the vehicle HVAC system and other vehicle systems to enable, providing a comfortable vehicle upon entry. The HVAC system will operate in the following possible ways:

- If the vehicle is equipped with a manual HVAC system it will be on and operating in the same way that the settings were adjusted when the vehicle was last used.
- If the vehicle is equipped with an automatic HVAC system it will operate as necessary to meet the temperature setting it was left at. If the conditions are such that the system needs AC, rear defrost, or defrost then those functions will operate. The indicator lights for these functions will not illuminate even if the features are on.
- If the vehicle is equipped with an automatic HVAC system but the system is in manual mode then it will operate the same as a manual system equipped vehicle with the HVAC operating however it was adjusted when the vehicle was last used.

The turn signal lamps will illuminate to indicate the vehicle has received the remote start request. Each time a remote vehicle start is performed, the vehicle doors are locked, however they may then be unlocked/ locked with the transmitter at any time. Only the first and second vehicle transmitters are able to control the remote vehicle start function. Any additional remote transmitters programmed to the vehicle will perform all other remote functions. Once activated, the engine is allowed to run for 10 minutes. The remote vehicle start time may be extended by an additional 10 minutes by again pressing and releasing the lock button and then pressing and holding the remote vehicle start buttons on the transmitter. This feature is called a remote vehicle start continue and allows a maximum of 20 minutes of engine running. If the remote vehicle start continue is performed at 7 minutes into the initial 10 minute time-out, a total of 17 minutes of engine running would occur. The remote vehicle start event may be suspended at any time by pressing only the remote vehicle start button on the transmitter or by entering the vehicle and turning ON the hazard lamps.

In between ignition cycles, only two remote vehicle start events may occur or be attempted. Once two events or attempts have been made, future remote vehicle start events will be suspended until the vehicle is started using the ignition.

Enable/Disable Remote Vehicle Start

Using the driver information center, remote vehicle start may be enabled or disabled as a part of vehicle personalization. Refer to the vehicle owners manual for more information.

Hood Ajar Switch

The hood switch provides status of the hood to the BCM for remote vehicle start purposes. The switch is integrated into the hood latch assembly.

Remote Vehicle Start Circuit Description

The BCM receives a signal from the keyless entry transmitter indicating a remote vehicle start request. A message is then sent to the BCM which determines if a crank request message will be sent to the ECM to allow engine starting. To determine if conditions are correct for a remote vehicle start event, the BCM will ensure the following conditions are met:

- A valid hood ajar switch closed signal is present.
- The doors are locked.
- The low fuel warning light is off.
- The hazard switch is OFF.
- The vehicle power mode is correct.
- No content theft deterrent alarm triggers are present.

When the BCM determines all conditions meet those required for a remote vehicle start event, a message is sent via serial data to the ECM. The ECM relies on the remote vehicle start message from the BCM to enable remote vehicle start when the crank request signal is received. If the ECM does not receive a valid remote vehicle start message, it will not attempt to start the engine. While the ECM is in remote vehicle start mode it will suspend engine operation if any of the following additional conditions occur:

- Vehicle speed is greater than 0
- Transmission is not in PARK
- Excessive engine coolant temperature
- Low oil pressure
- The malfunction indicator lamp (MIL) is commanded ON
- Engine crank time is greater than 30 seconds
- Excessive engine speed
- Accelerator pedal position too high
- Remote start timer equals 0
- Immobilizer system indicates tamper

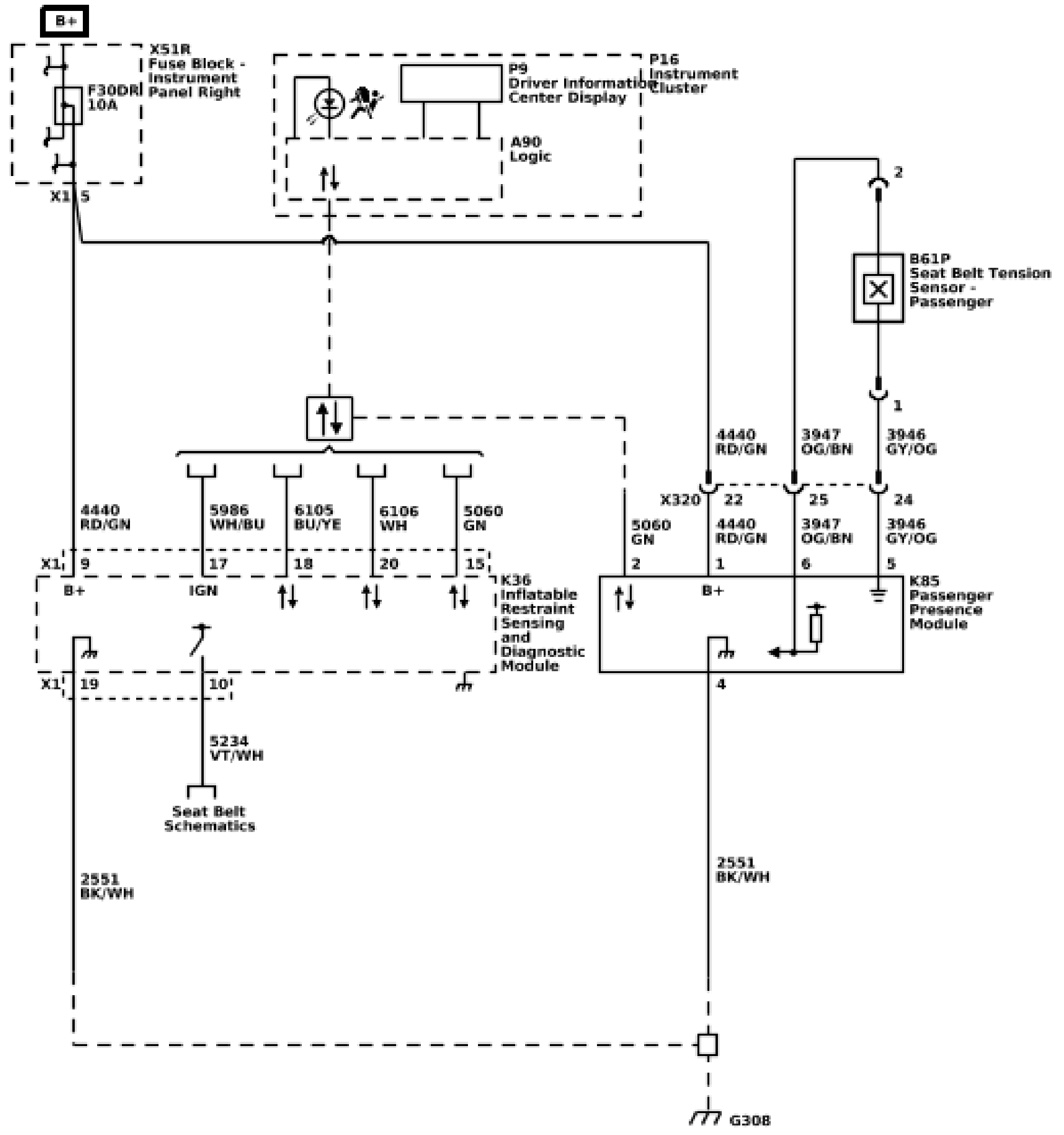
Keyless Entry Personalization

Vehicle lock/unlock functions and remote vehicle start settings may be personalized. For functional descriptions and personalization instructions, refer to the vehicle owners manual.

Supplemental Restraints

Schematic and Routing Diagrams

SIR Schematics (Power, Ground, Serial Data and Passenger Presence)


B+
X51R
Fuse Block - Instrument Panel Right
F30DR
10A
X1 5
P16
Instrument Cluster
P9
Driver Information Center Display
A90
Logic
B61P
Seat Belt Tension Sensor - Passenger
2
1
4440
RD/GN
3947
OG/BN
3946
GY/OG
X320
22
25
24
5060
GN
4440
RD/GN
3947
OG/BN
3946
GY/OG
2
1
6
5
B+
K85
Passenger Presence Module
4
4440
RD/GN
5986
WH/BU
6105
BU/YE
6106
WH
5060
GN
X1 9
17
18
20
15
B+
IGN
K36
Inflatable Restraint Sensing and Diagnostic Module
X1 19
10
5234
VT/WH
Seat Belt Schematics
2551
BK/WH
2551
BK/WH
G308

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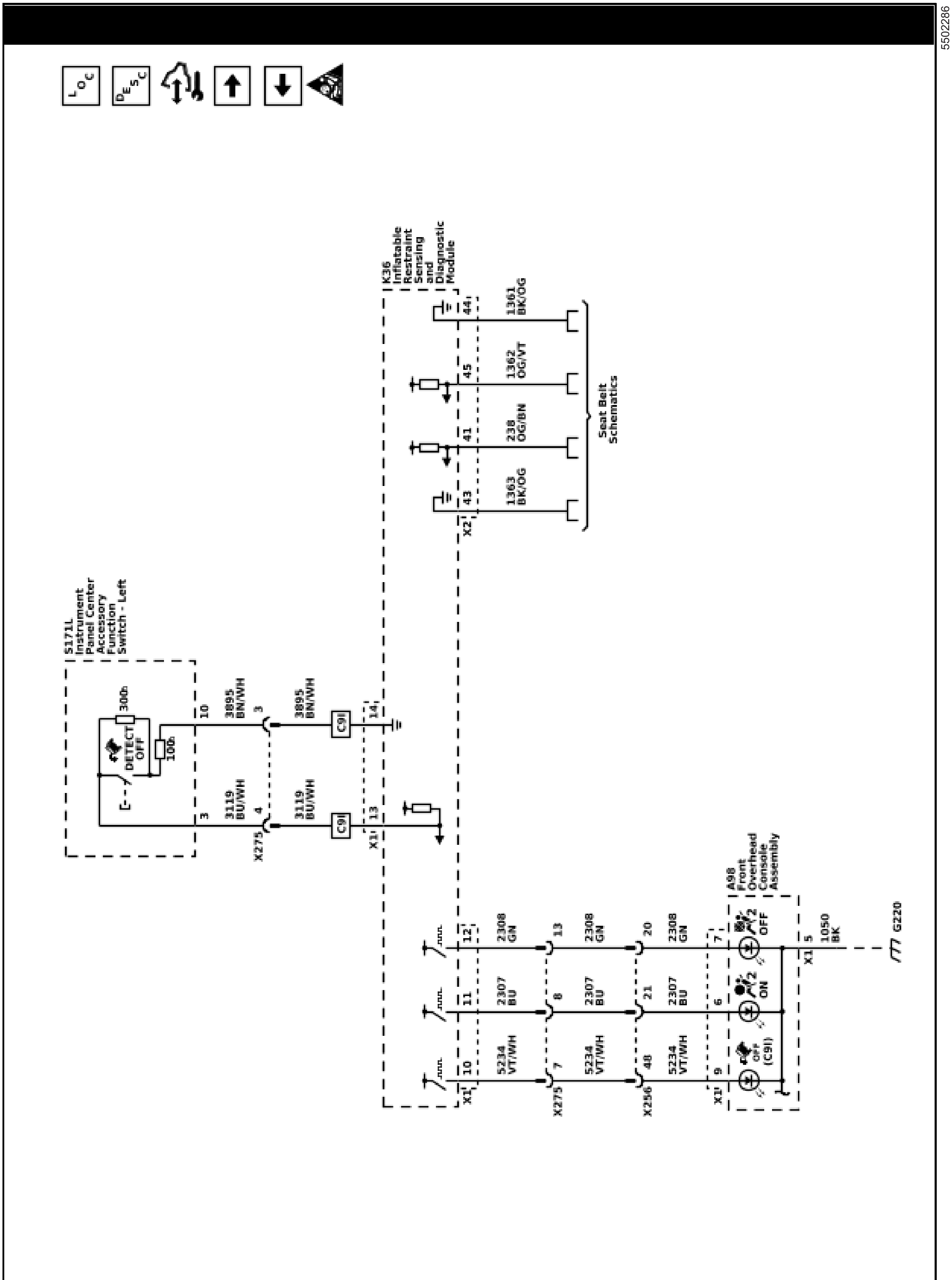
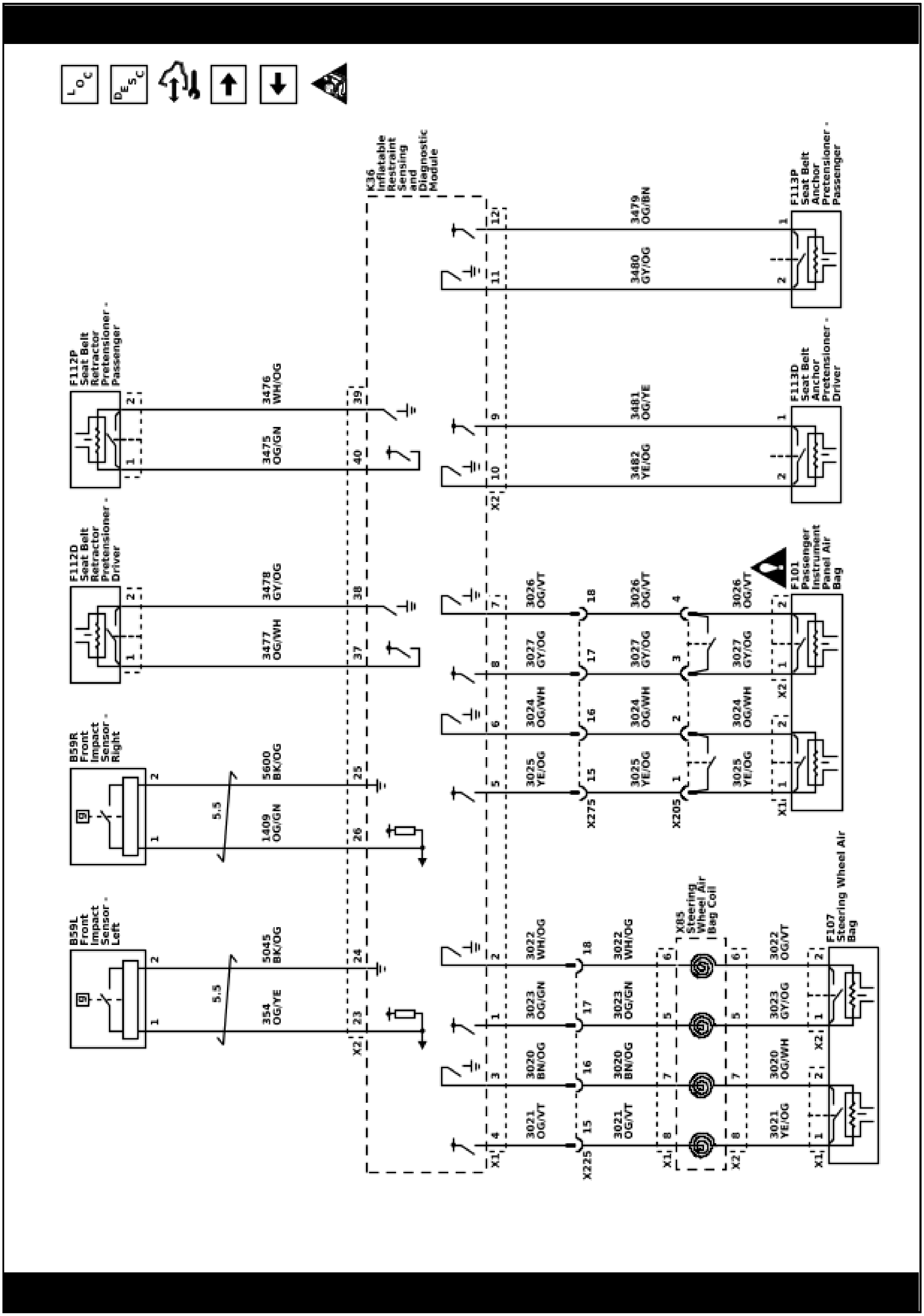
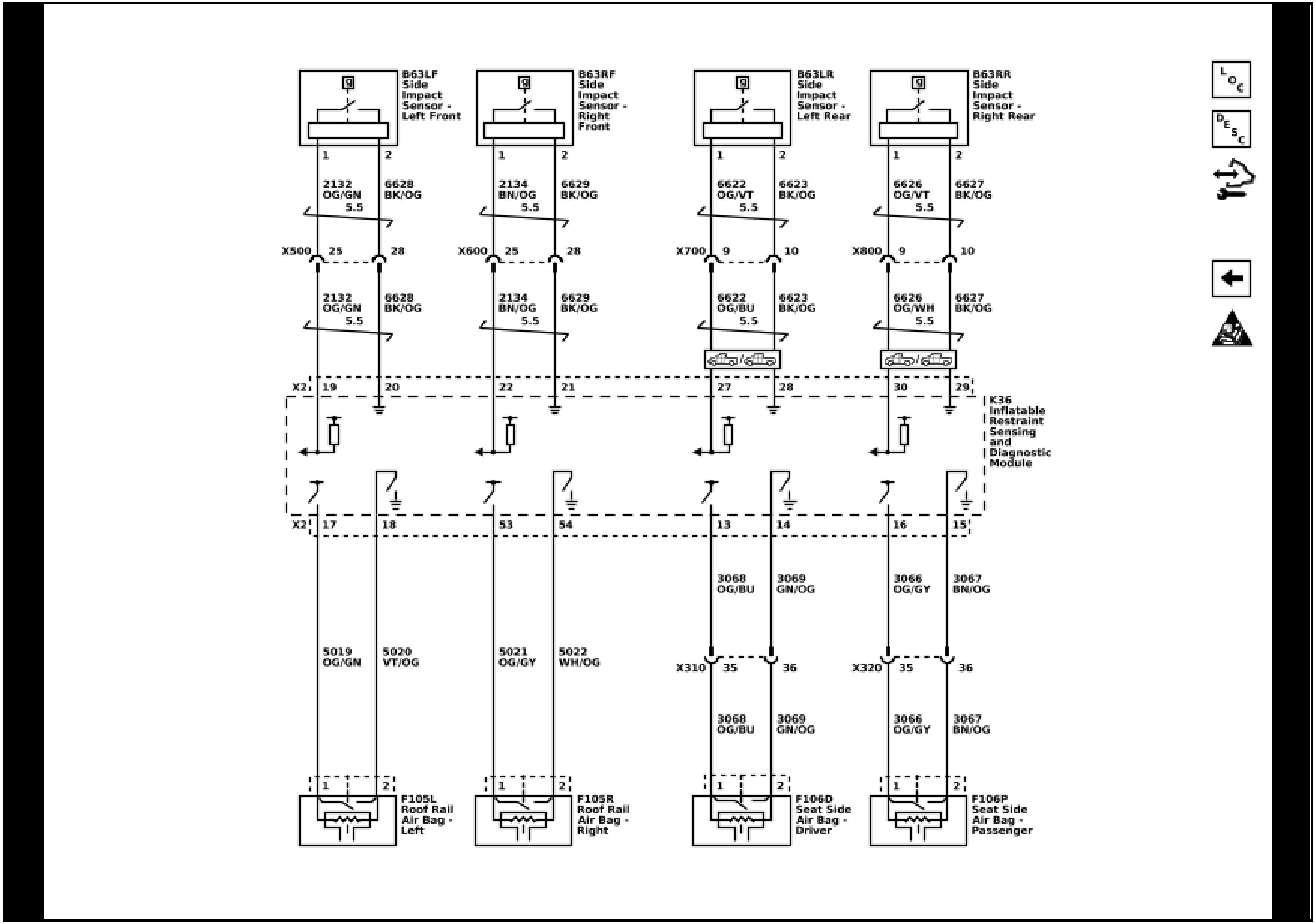
SIR Schematics (Seat Position, Disable Switch, and Indicators)


5502286
K36 Inflatable Restraint Sensing and Diagnostic Module
S171L Instrument Panel Center Accessory Function Switch - Left
DETECT OFF
300Ω
100Ω
3 10
3119 BU/WH
3895 BN/WH
X275 4 3
C9I
X1 13 14
X2 43 41 45 44
1363 BK/OG
238 OG/BN
1362 OG/VT
1361 BK/OG
Seat Belt Schematics
X1 10 11 12
5234 VT/WH
2307 BU
2308 GN
X275 7 8 13
X256 48 21 20
X1 9 6 7
A98 Front Overhead Console Assembly
OFF (C9I)
ON
OFF
X1 5
1050 BK
G220

SIR Schematics (Frontal Impact Sensing and Deployment)


5502287
K36 Inflatable Restraint Sensing and Diagnostic Module
B59L Front Impact Sensor - Left
B59R Front Impact Sensor - Right
F112D Seat Belt Retractor Pretensioner - Driver
F112P Seat Belt Retractor Pretensioner - Passenger
F113D Seat Belt Anchor Pretensioner - Driver
F113P Seat Belt Anchor Pretensioner - Passenger
F101 Passenger Instrument Panel Air Bag
F107 Steering Wheel Air Bag
X85 Steering Wheel Air Bag Coil
354 OG/YE
5045 BK/OG
1409 OG/GN
5600 BK/OG
3477 OG/WH
3478 GY/OG
3475 OG/GN
3476 WH/OG
3482 YE/OG
3481 OG/YE
3480 GY/OG
3479 OG/BN
3021 OG/VT
3020 BN/OG
3023 OG/GN
3022 WH/OG
3021 YE/OG
3020 OG/WH
3023 GY/OG
3022 OG/VT
3025 YE/OG
3024 OG/WH
3027 GY/OG
3026 OG/VT
5.5
X1
X2
X225
X275
X205
1
2
3
4
5
6
7
8
9
10
11
12
15
16
17
18
23
24
25
26
37
38
39
40

SIR Schematics (Side Impact Sensing and Deployment)


B63LF Side Impact Sensor - Left Front
B63RF Side Impact Sensor - Right Front
B63LR Side Impact Sensor - Left Rear
B63RR Side Impact Sensor - Right Rear
1
2
2132 OG/GN 5.5
6628 BK/OG
2134 BN/OG 5.5
6629 BK/OG
6622 OG/VT 5.5
6623 BK/OG
6626 OG/VT 5.5
6627 BK/OG
X500 25 28
X600 25 28
X700 9 10
X800 9 10
2132 OG/GN 5.5
6628 BK/OG
2134 BN/OG 5.5
6629 BK/OG
6622 OG/BU 5.5
6623 BK/OG
6626 OG/WH 5.5
6627 BK/OG
X2 19 20 22 21 27 28 30 29
K36 Inflatable Restraint Sensing and Diagnostic Module
X2 17 18 53 54 13 14 16 15
3068 OG/BU
3069 GN/OG
3066 OG/GY
3067 BN/OG
5019 OG/GN
5020 VT/OG
5021 OG/GY
5022 WH/OG
X310 35 36
X320 35 36
3068 OG/BU
3069 GN/OG
3066 OG/GY
3067 BN/OG
F105L Roof Rail Air Bag - Left
F105R Roof Rail Air Bag - Right
F106D Seat Side Air Bag - Driver
F106P Seat Side Air Bag - Passenger
5502288

Description and Operation

Supplemental Inflatable Restraint System Description and Operation

SIR System Overview

To view the locations of the air bags, seat belt pretensioners, and impact sensors, refer to *Master Electrical Component List on page 7-1129*.

The Supplemental Inflatable Restraint (SIR) system, comprised of the Inflatable Restraint Sensing and Diagnostic Module (SDM), impact sensors, air bags, and seat belt pretensioners, supplements the protection offered by the seat belts. The SDM determines the severity of a collision using data collected from impact sensors located at strategic points on the vehicle. When the SDM detects a collision, it processes the information provided by the sensors to provide the safest combination of air bag and pretensioner deployment. The SDM will deploy the air bags and pretensioners if it detects a collision of sufficient force. If the force of the impact is not sufficient to warrant air bag deployment, the SDM may still deploy the seat belt pretensioners. The SDM contains a sensing device that translates vehicle acceleration to an electrical signal. The SDM compares these signals to the threshold values stored in memory. If the signals exceed the stored threshold value, the SDM will determine the severity of the event and may deploy restraints. The SDM continuously monitors the deployment loops and electrical components for malfunctions. Upon detection of a circuit malfunction, the SDM will set a DTC and illuminate the SIR system air bag malfunction indicator. The steering column and knee bolsters are designed to absorb energy and compress during frontal collisions to limit leg movement and decrease the chance of injury to the driver and passenger.

SIR System Air Bag Malfunction Indicator

The SIR system air bag malfunction indicator, located in the instrument cluster, is used to notify the driver of SIR system malfunctions and verify that the SDM is communicating with the instrument cluster. When the ignition is turned on, the SDM is supplied with ignition voltage. The instrument cluster will momentarily turn on the SIR system air bag malfunction indicator. While the indicator is on, the SDM conducts tests on all SIR system components and circuits. If no malfunctions are detected the SDM will communicate with the instrument cluster through the serial data circuit and command the SIR system air bag malfunction indicator to turn off. The SDM provides continuous monitoring of the air bag circuits by conducting a sequence of checks. If a malfunction is detected the SDM will set a DTC and command the instrument cluster to illuminate the SIR system air bag malfunction indicator via serial data. The presence of an SIR system malfunction could result in non-deployment of the inflatable restraints or deployment in conditions that normally would not warrant deployment. The SIR system air bag malfunction indicator will remain on until the malfunction has been repaired.

Inflatable Restraint Sensing and Diagnostic Module

The SDM is the control unit for the SIR system. The SDM contains internal sensors in addition to the external impact sensors. The SDM contains sensor which translate vehicle acceleration into an electrical signal, which may be used by other modules. In the event of a collision, the SDM compares the signals from the internal and external impact sensors to a threshold value stored in memory. When the generated signals exceed the stored value, the SDM will cause current to flow through the appropriate deployment loops to deploy the restraints. The SDM records the SIR system status when a deployment occurs and illuminates the air bag malfunction indicator. The SDM performs continuous diagnostic monitoring of the SIR system electrical components and circuitry when the ignition is on. If the SDM detects a malfunction, a DTC will set and the SDM will command the instrument cluster to illuminate the air bag malfunction indicator, notifying the driver that a malfunction exists. If power is lost during a collision, the SDM maintains a 23 V loop reserve for deployment of the air bags. It is important when disabling the SIR system for servicing or rescue operations to allow the 23 V loop reserve to dissipate, which could take up to 1 minute.

Air Bags

Air bags contain a housing, inflatable air bag, initiating device (two initiating devices for dual inflator), canister of gas generating material and, in some cases, stored compressed gas. The deployment loops supply current to deploy the air bags. The driver steering wheel and passenger instrument panel air bags have two stages of deployment, which varies the amount of restraint to the occupant according to the collision severity. For moderate frontal collisions the air bags deploy at less than full deployment which consists of stage 1 of the air bag. For more severe frontal collisions a full deployment is initiated which consists of stage 1 and stage 2 of the air bag. There is a vent deployment loop (if equipped) located in the Passenger Instrument Panel Air Bag. It is used to enhance control of the force and rate of deployment. The current passing through the air bags ignites the material in the canister producing a rapid generation of gas and in some cases, the release of compressed gas. The gas produced from this reaction rapidly inflates the air bag. Once the air bag is inflated it quickly deflates through the air bag vent holes and/or the bag fabric. Each air bag is equipped with a shorting bar (If Equipped) located in the connector. The shorting bar (If Equipped) shorts the air bag deployment loop circuitry to prevent unwanted deployment of the air bag when it is disconnected.

Seat Belt Pretensioners

The seat belt pretensioners consist of a housing, seat belt retractor, seat belt anchor, seat belt webbing, initiator, and a canister of gas generating materials. The initiator is part of the seat belt pretensioner deployment loop. When the vehicle is involved in a collision of sufficient force, the SDM causes current to flow through the seat belt deployment loops to the initiator. Current passing through the initiator ignites the material in the canister producing a rapid generation of gas. The gas produced from this reaction deploys the seat belt pretensioners which removes the slack in the seat belts. Depending on the severity of the collision, the seat belt pretensioners may deploy without the frontal inflator modules deploying, or they will deploy immediately before the frontal inflator modules deploy. Each seat belt pretensioner connector is equipped with a shorting bar (If Equipped), which shorts the seat belt pretensioner circuitry to prevent unwanted deployment of the seat belt pretensioner when the connector is disconnected.

Impact Sensors

The impact sensors contain a sensing device which monitors vehicle acceleration to detect collisions that are severe enough to warrant air bag deployment. The impact sensors are not part of the deployment loop, but instead provide input to the SDM.

Passenger Presence System and Passenger Air Bag Indicator (If Equipped)

The Passenger Presence System (PPS) monitors the type of occupant sitting in the front passenger seat and communicates that data to the SDM. The SDM uses this information to determine whether to enable or suppress the passenger instrument panel air bag. The PPS consists of an electronic control module, a pressure sensitive mat in the seat, and passenger air bag on/off indicators. The PPS converts a pressure measurement into an electrical signal, which is used to determine the type of occupant sitting in the front passenger seat. If the measured pressure is less than the calibrated value, then the passenger presence module will communicate with the SDM over serial data to disable the passenger instrument panel air bag. If the measured pressure is greater than the calibrated value, then it will enable the passenger air bag. The SDM will notify the customer of the status by illuminating one of the passenger air bag on/off indicators. The passenger presence module monitors itself for malfunctions. If a malfunction is detected, the passenger presence module sets a DTC and informs the SDM, so that the SDM can illuminate the air bag malfunction indicator on the instrument cluster.

Seat Position Sensor (If Equipped)

The seat position sensor is used to determine the proximity of the driver or front passenger to the respective front air bag. There are two states of seat position – forward and rearward. The SDM will disable the stage 2 deployment when the seat is forward and enable stage 2 deployment when the seat is rearward. The SDM monitors the seat position sensor circuit for malfunctions, and if detected, will set a DTC, illuminate the air bag malfunction indicator, and disable stage 2 deployment. There could be an improper air gap between the seat position sensor and metal bracket causing a malfunction without setting a DTC. An improper air gap will form if the sensor is not mounted properly, the bracket the sensor is mounted on is damaged, or the metal track the sensor detects is damaged.

Seat Belt Tension Sensor (If Equipped)

The seat belt tension sensor is mounted on the passenger seat belt retractor to measure the seat belt tension. If the shoulder portion of a passenger seat belt is fully extended, the infant car seat restraint locking feature may be engaged, disabling the passenger air bag.

Passenger Air Bag Disable Switch (C99)

The passenger air bag disable switch provides the means to manually disable the ability for the passenger instrument panel air bag to deploy. The vehicle has a passenger air bag status indicator to inform the driver when the passenger air bag is on or off based on the disable switch position.

Rollover Protection Disable Switch (C9I)

The rollover protection disable switch provides the means to manually turn on or off the deployment of associated air bags and pretensioners when the SDM has determined that a rollover event is imminent. This prevents the deployment of calibrated air bags and pretensioners in the case of a rollover event, but does not affect deployments due to front, side, or rear events. Rollover protection is enabled upon powering the vehicle. To disable rollover protection, the ignition must be on with the engine off and the rollover disabled switch must be pressed for several seconds until a confirmation noise is heard and the rollover protection disabled indicator on the overhead console illuminates. The engine can then be started. The rollover protection disable feature will remain on until the ignition is turned off or the rollover disable switch is pressed again to re-enable rollover protection.

Seat Belt Indicators

The seat belt indicators are controlled by the SDM. For further information on seat belt indicators, refer to Seat Belt System Description and Operation.

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Section 9

Transmission

Shift Lock Control 9-3
  Schematic and Routing Diagrams 9-3
    Shift Lock Control Schematics 9-4
  Description and Operation 9-5
    Automatic Transmission Shift Lock Control Description and Operation 9-5

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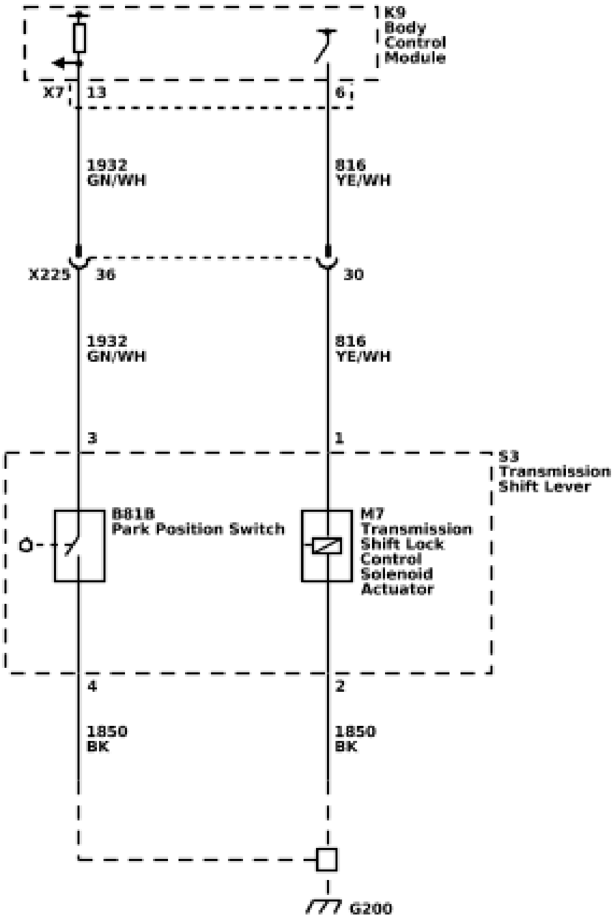
Shift Lock Control

Schematic and Routing Diagrams

Shift Lock Control Schematics (Shift Lock Control)


K9
Body
Control
Module
X7
13
6
1932
GN/WH
816
YE/WH
X225
36
30
1932
GN/WH
816
YE/WH
3
1
S3
Transmission
Shift Lever
B818
Park Position Switch
M7
Transmission
Shift Lock
Control
Solenoid
Actuator
4
2
1850
BK
1850
BK
G200

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Description and Operation

Automatic Transmission Shift Lock Control Description and Operation

The Automatic Transmission Shift Lock Control System is a safety device that prevents an inadvertent shift out of PARK when the engine is running. The driver must press the brake pedal before moving the shift lever out of the PARK position. The system consists of the following components:

- The Automatic Transmission Shift Lock Solenoid (serviced as the Automatic Transmission Shift Lock Actuator)
- The Body Control Module (BCM)
- The Engine Control Module (ECM)

The BCM controls the voltage to the shift lock control solenoid though the shift lock control solenoid controlled voltage circuit. The following conditions must be met before the BCM will supply voltage to the shift lock control solenoid:

- The ignition is in the ON position.
- The ECM sends an input via GMLAN serial data to the BCM when the Transmission Control Module (TCM) indicates the transmission is in the PARK position.
- The BCM receives a brake applied input from the stop lamp switch.

Since the shift lock control solenoid is permanently grounded, the BCM supplies voltage to the automatic transmission shift lock control solenoid, releasing the mechanical lock on the shift lever as the solenoid energizes. The energized solenoid allows the driver to move the shift lever out of the PARK position. When the brake pedal is not applied, the BCM turns the control voltage output of the shift lock control solenoid OFF, de-energizing the shift lock control solenoid. When the transmission is in the PARK position, the de-energized shift lock control solenoid will prevent shifting as the lever is mechanically locked in the PARK position.

During remote start operation the BCM will de-energize the automatic transmission shift lock control circuit, locking the shift lever in the PARK position

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A

Automatic HVAC Description and Operation ... 6-12

B

Battery
  Description and Operation ... 5-11

C

Charging System
  Description and Operation ... 5-11
Component Connector End Views ... 7-92

D

Data Link Communications
  Description and Operation ... 7-24
Door Ajar Indicator
  Description and Operation ... 2-64
Door Component Views ... 7-1023

E

Electrical Center Identification Views ... 7-29
Electrical Power Management Description and Operation ... 5-15
Electronic Parking Brake
  Control Module Description ... 3-5
Endgate
  Description and Operation ... 2-66, 2-67
Exterior Lighting Systems
  Description and Operation ... 2-47

F

Front of Vehicle/Engine Compartment Component Views ... 7-976
Full-Cut Method Description ... 2-12

G

Garage Door Opener
  Description and Operation ... 8-12
Ground Views ... 7-1039

H

Harness Routing Views ... 7-934
Heater and Air Conditioning
  System Description and Operation ... 6-3
Hood Ajar Indicator
  Description and Operation ... 2-68
Horn
  System Description and Operation ... 2-17

I

Immobilizer
  Description and Operation ... 8-5
Inline Harness Connector End Views ... 7-768
Instrument Panel/Center Console Component Views ... 7-1007
Interior Lighting System
  Description and Operation ... 2-51

K

Keyless Entry
  System Description and Operation ... 8-12

L

Load Shed System
  Description and Operation ... 5-17
Luggage Compartment/Rear of Vehicle Component Views ... 7-1030

M

Manual HVAC Description and Operation ... 6-23
Master Electrical Component List ... 7-1129
Mobile Device Wireless Charger
  Description and Operation ... 7-1063

P

Passenger Compartment/Roof Component Views ... 7-1013
Power Door Locks
  Description and Operation ... 2-68
Power Mode Description and Operation ... 7-1217, 7-1219
Power Outlets
  Description and Operation ... 7-1064
Power Windows
  Description and Operation ... 2-12
Powertrain Component Views ... 7-987

R

Rear Vision Camera
  Description and Operation ... 4-11
Rear Window Defogger
  Description and Operation ... 2-13
Rearview Camera
  Camera Full Display Mirror Description and Operation ... 4-11
Retained Accessory Power
  Description and Operation ... 7-1222
RPO Code List ... 1-7

S

Schematics
  Body Control Systems ... 7-20
  Cigar Lighter/Power Outlet ... 7-1056
  Data Communications ... 7-4
  Defogger ... 2-11
  Door Lock/Indicator ... 2-54
  Endgate ... 2-59
  Exterior Lamps ... 2-26
  Fog Lamps ... 2-25
  Ground Distribution ... 7-1103
  Headlamps/Daytime Running Lamps ... 2-19
  Hood Latch ... 2-63
  Horns ... 2-16

Schematics (cont'd)
  HVAC Systems - Automatic 6-5
  HVAC Systems - Manual 6-16
  Ignition Lock 7-1102
  Image Display Cameras 4-4
  Immobilizer 8-4
  Interior Lamps 2-41
  Interior Lamps Dimming 2-43
  Moveable Window 2-4
  Park Brake 3-4
  Power Distribution 7-1067
  Power Moding 7-1097
  Release Systems 2-58
  Remote Function 8-8
  Shift Lock Control 9-4
  SIR 8-16
  Starting and Charging 5-4
  Upfitter Provision 7-1122
Shift Lock Control
  Description and Operation 9-5
Starting System
  Description and Operation 5-18
Stationary Window
  Description 2-14
Stop/Start System
  Description and Operation 5-19
Supplemental Inflatable Restraint
  System Description and Operation 8-20
Surround Vision Camera
  Description and Operation 4-11, 4-13

U
Urethane Adhesive
  Description 2-14

V
Vehicle Certification, Tire Placard, and Anti-Theft
  Label 1-5
Vehicle, Engine and Transmission ID and VIN
  Location, Derivative and Usage 1-3

W
Wheels/Vehicle Underbody Component
  Views 7-1038